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Engineering and Science

NFRAP
Approved
CBT 5/10/01

May 10, 2001

Ms. Carolyn Thompson
Remedial Project Manager
U.S. Environmental Protection Agency
61 Forsyth Street, SW 11th Floor
Atlanta, Georgia 30303

Subject: Reassessment Report (final)
Zep Manufacturing Company
EPA ID No. GAD003267192
EPA Contract No. 68-S4-01-01 (STAT 4)
Task Order No. 0001

Dear Ms. Thompson:

The TN & Associates, Inc. (TN&A) Superfund Technical Assessment Team (STAT) is submitting the revised cover page of the final reassessment report for the Zep Manufacturing site in Atlanta, Fulton County, Georgia. The scoresheets, confidential pages, CERCLA Eligibility form, all references cited, and the original topographic maps have not changed and were submitted to EPA on April 6, 2001.

Please contact me or Greg Kowalski at (678) 355-5550 if you have any questions regarding this report.

Sincerely,

Matt Ellender
STAT Project Manager

Enclosure

CC: Jeff Napier, EPA Contracting Officer (w/o enclosure)
Cindy Gurley, EPA Task Order Project Officer (w/o enclosure)
Stacy Hill, EPA Contract Specialist (w/o enclosure)



10730185

REASSESSMENT REPORT

**ZEP MANUFACTURING COMPANY
ATLANTA, FULTON COUNTY, GEORGIA**

U.S. EPA ID No. GAD003267192

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
61 Forsyth Street
Atlanta, Georgia 30303**

Prepared by:

**TN & Associates, Inc.
840 Kennesaw Avenue, Suite 7
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Contract No.	:	68-S4-01-01
Task Order No.	:	0001
Date Submitted	:	May 10, 2001
EPA Task Monitor	:	Carolyn Thompson
Telephone No.	:	404-562-8913
Prepared by	:	John Axelson
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CERCLA Eligibility Form

Site Name: Zep Manufacturing Company

City/County/State: Atlanta, Fulton County, Georgia

EPA ID Number: GAD003267192

Type of Facility: X Generator (LQG) Transporter Disposal
 Treatment Storage(> 90 days)

	Yes	No
Has this facility treated, stored, or disposed of a RCRA hazardous waste since Nov. 19, 1980?	<u>X</u>	<u> </u>
Has a RCRA Facility Assessment (RFA) been performed on this site?	<u> </u>	<u>X</u>
Does the facility have a RCRA operating or post-closure permit? If so, date issued:	<u> </u>	<u>X</u>
Did the facility file a RCRA Part A application?	<u>X</u>	<u> </u>
If so:		
1) Does the facility currently have interim status?	<u> </u>	<u>X</u>
2) Did the facility withdraw its interim status?	<u>X</u>	<u> </u>
3) Is the facility a known or possible protective filer?	<u> </u>	<u>X</u>
Is the facility a late (after Nov. 19, 1980) or non-filer that has been identified by EPA or the State?	<u> </u>	<u>X</u>
Is the site a Federal Facility?	<u> </u>	<u>X</u>
Is there at least one source on site, which is not covered by CERCLA Petroleum Exclusion Legislation?	<u>X</u>	<u> </u>
Is the facility owned by an entity that has filed for bankruptcy under Federal or State laws?	<u> </u>	<u>X</u>
Has the facility lost authorization to operate or had its interim status revoked?	<u> </u>	<u>X</u>
Has the facility been involved in any other RCRA enforcement action?	<u> </u>	<u>X</u>

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) has tasked the TN & Associates, Inc., (TN&A) Superfund Technical Assessment Team (STAT) to perform site reassessments under contract number 68-S4-01-01. Reassessments are conducted to evaluate a site's current Hazardous Ranking System (HRS) status, document what is contained within the site files, update target information, generate a new site score, and summarize all the information in a report submitted to EPA. This Reassessment report has been prepared in accordance with the scope of work requirements of Task Order No. 0001, for the ZEP Manufacturing (ZEP) site, EPA ID No. GAD003267192, located in Atlanta, Fulton County, Georgia. This Reassessment Report evaluates the ZEP site and provides a recommendation regarding further action.

2.0 SITE BACKGROUND

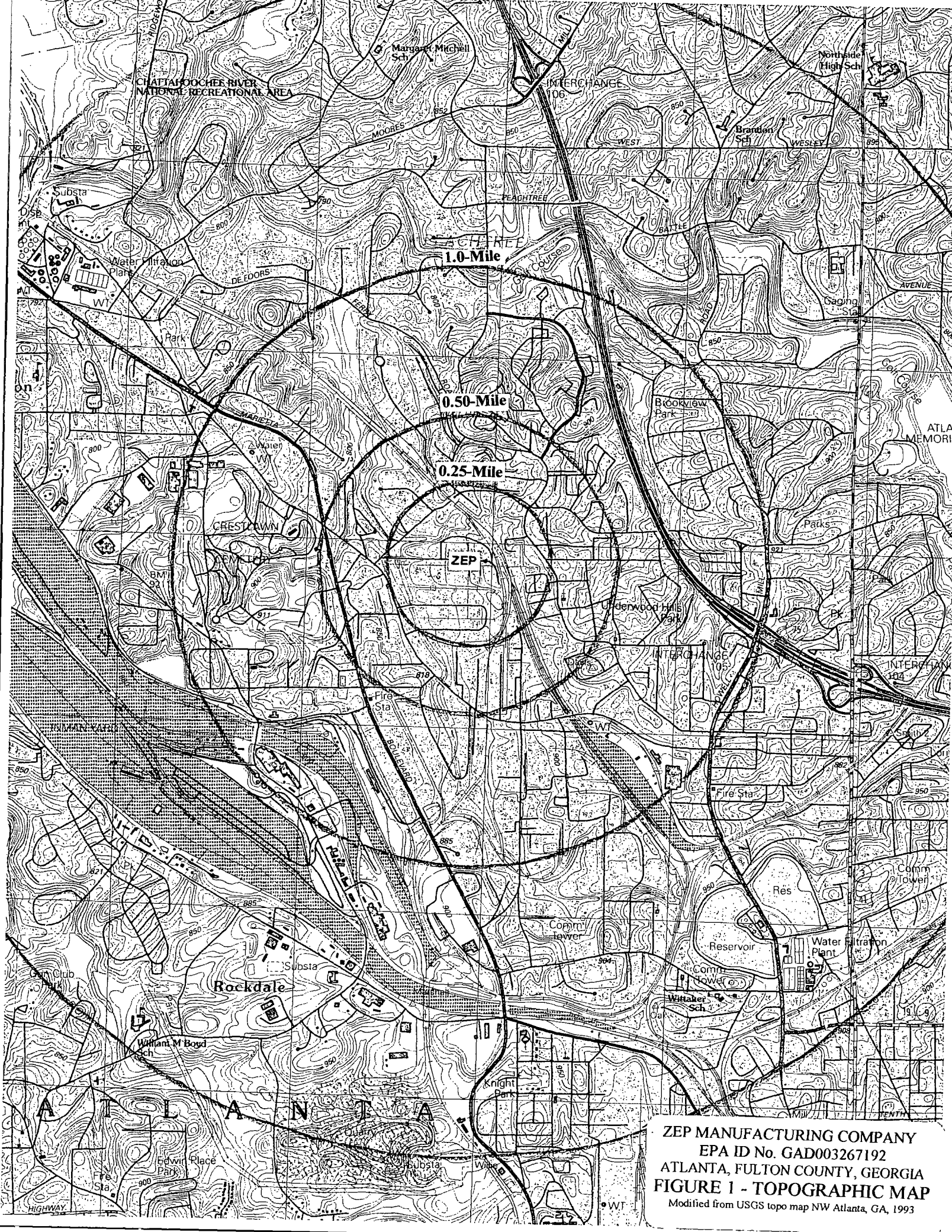
This section describes the site and its present and past operations (including waste disposal practices and regulatory history), the environmental setting and geology, previous investigations, and the source areas located at the facility.

2.1 SITE DESCRIPTION

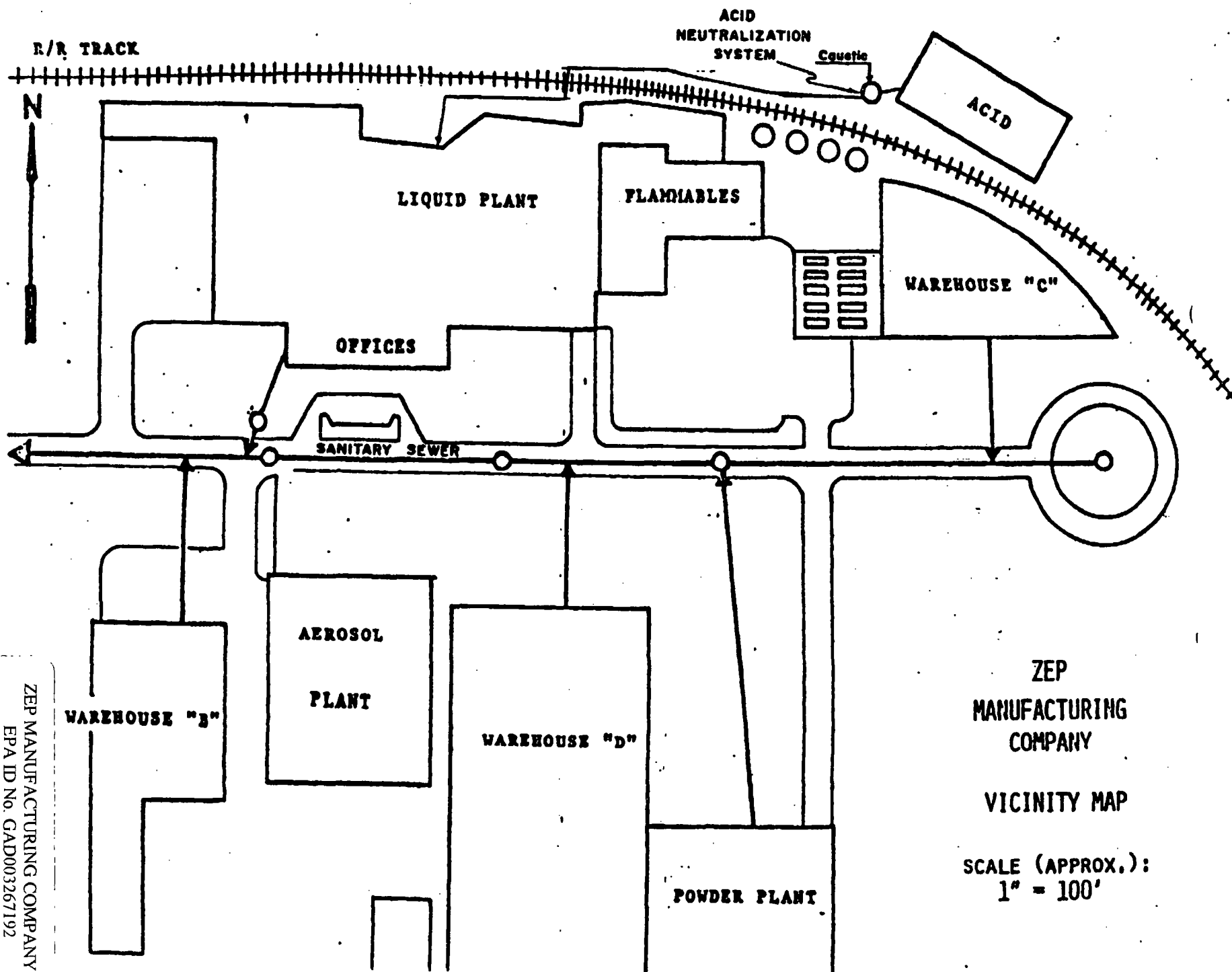
The ZEP facility is located in an industrial park at 1310 Seaboard Industrial Boulevard within the city limits of Atlanta (see Figure 1). The geographic coordinates of the facility are 33° 48' 33" north latitude and 84° 25' 43" west longitude (Ref. 1). The on-site features include the following: two story office/production building, two tank farms, a warehouse, an acid blending building, aerosol plant, powder blending plant, hand lotion blending area, wastewater treatment plant, a warehouse, and raw material and product storage areas (see Figure 2). The overall size of the facility property is approximately 33 acres (Refs. 2, p. 2; 3).

2.1.1 Site History

According to the 1989 Preliminary Assessment (PA) report, National Service Industries, Incorporated of Atlanta, Georgia, constructed and began to operate the facility in 1956 (Ref. 2, p. 2). In 1970, ZEP Manufacturing Company, a subsidiary of National Service Industries, became the operator of the facility (Ref. 2, p. 2). Current tax records indicate that National Service Industries is still the owner of the property (Ref. 3).



ZEP MANUFACTURING COMPANY
EPA ID No. GAD003267192
ATLANTA, FULTON COUNTY, GEORGIA
FIGURE 1 - TOPOGRAPHIC MAP
Modified from USGS topo map NW Atlanta, GA, 1993



**ZEP
MANUFACTURING
COMPANY**

VICINITY MAP

**SCALE (APPROX.):
1" = 100'**

ZEP MANUFACTURING COMPANY
EPA ID No. GAD003267192
ATLANTA, FULTON COUNTY, GEORGIA
FIGURE 2 - SITE DIAGRAM
Modified from 1989 PA (GAEPD)

According to the 1989 PA report, the facility manufactures over 1000 products including cleaning compounds, deodorants, dishwashing detergents, hand lotion, floor wax, and pesticides (Ref. 2, p. 2). These products are manufactured by purchasing bulk chemicals, blending them together, and repackaging the finished products (Ref. 2, p. 3). The facility uses approximately 200 above ground storage and mixing tanks to handle bulk liquids. Organic vapors generated from the tanks and associated filling stations are released to the atmosphere through roof vents (Ref. 2, p. 3).

The facility uses acids to manufacture various cleaning agents. The acids are stored and mixed in tanks within a separate building known as the Acid House. Emissions from the acids are vented to a wet scrubber for treatment (Ref. 2, p. 3).

Solids used to manufacture various products are stored in silos and transferred pneumatically into the powder plant. Powdered solids are mixed in ribbon blenders with various liquids to make finished products that are stored in product drums. Dust emissions generated from the silos are abated through fabric filters, and dust and mists generated from the product mixing are treated by a wet scrubber (Ref. 2, p. 3).

The facility also utilizes an aerosol plant (Refer to Figure 2) where finished liquid products are dispensed into cans with aerosol propellants. According to the 1989 PA report, emissions from the aerosol plant are uncontrolled (Ref. 2, p. 3).

2.1.2 Regulatory History

In 1980 ZEP filed for a RCRA Part A permit to neutralize waste acids in a tank, but it was found that this activity was exempt from RCRA requirements and the application was withdrawn in 1983 (Ref. 2, p. 3).

Two underground storage tanks were removed from the site prior to 1982. The Georgia Department of Natural Resources, Environmental Protection Division (GAEPD) collected soil samples on April 29, 1982, which indicated the presence of petroleum products in the vicinity of the former tank locations. The area has been backfilled with clean soil and paved over. (Ref. 2, p. 3).

The facility was inspected by the GAEPD on May 10, 1984. A notice of violation was issued for inadequacies in the Emergency Preparedness and Contingency Plan. ZEP remedied the situation and the GAEPD notified ZEP that they were in compliance on October 5, 1984 (Ref. 2, p. 4).

In 1986, a wastewater pipe plugged resulting in a wastewater discharge to a tributary of Woodall Creek. This release resulted in a consent order that was issued on February 21, 1986, that required corrective actions and a \$2000 penalty (Ref. 2, p. 4).

Another inspection was performed at the ZEP facility by the GAEPD on November 13, 1987. Violations of the Emergency Preparedness and Contingency Plan were documented and another notice of violation was issued. Compliance was regained on March 24, 1988 (Ref. 2, p. 4).

On November 19, 1987, a spill was reported regarding a ruptured 55-gallon drum of toilet disinfectant. The spill was contained and no further action was required (Ref. 2, p. 4).

On July 13, 1988, another inspection was completed by GAEPD due to complaints from a neighboring business. No violations were found (Ref. 2, p. 4).

Regulatory records indicate that the ZEP facility is a large quantity generator of hazardous waste and reports waste generation under the Biennial Reporting System (BRS) (Ref. 4). The GAEPD regulates hazardous waste under the Rules for Hazardous Waste Management - O.C.G.A. 391-3-11 (Ref. 2, p. 3). According to the most recent BRS Facility Waste Detail Report, ZEP generated and shipped 274 tons of federal waste in 1997. The following amounts and types made up the 274 tons of waste: 4.675 tons of acidic aqueous waste; 20.36 tons of halogenated/nonhalogenated mixed solvents; 33.121 tons of low-solvent aqueous waste; 0.135 tons of inorganic solid waste; 122.584 tons of halogenated/nonhalogenated mixed solvents; and 92.674 tons of halogenated solvents (Ref. 4)

The ZEP facility maintains an Air Emissions permit (SIP#2899-060-1068-5) through the GAEPD, Air Protection Branch. The facility was inspected by the Air Protection Branch on May 11, 1999. No violations were documented during the inspection. General comments were made that the hatches on mixing tanks should be closed and maintenance should be contacted concerning control devices (Ref. 5).

According to the Toxic Release Inventory System (TRIS) database maintained by EPA, ZEP has released approximately twenty chemicals into the air each year from 1987 to 1998. In 1998 (the most recent year that data is available) ZEP released 9,395 pounds of air emissions (Ref. 6). For a complete list of the type and quantity of chemicals released via air stack or fugitive air emissions, please refer to the EPA Envirofacts Report, *Chemicals Released to Air* (Ref. 7, pp. 2-4).

In 1987 ZEP reported nine pounds of chemicals discharged to an unnamed feeder creek to Peachtree Creek (Ref. 8, p. 4). The discharged chemicals included 1,1,1-trichloroethane, cresol, dichloromethane, diethanolamine, ethylene glycol, formaldehyde, phosphoric acid, toluene, and xylene (Ref. 8, p. 4). Under normal operating conditions wastewater from the facility is sent to a pretreatment plant prior to discharge into the City of Atlanta sanitary sewer system, as a result, there are no direct discharges to surface water so the facility does not have an NPDES permit (Refs. 2, p. 3; 9).

The facility also submitted a notice of intent form to the GAEPD concerning a non-point source storm water permit. The notice of intent basically provides information on the facility to the GAEPD and requires ZEP to comply with storm water regulations for industrial facilities. These regulations require that the facility prepare and implement a Storm Water Pollution Prevention Plan and implement Best Management Practices to control potential impacts to storm water (Ref. 10).

2.2 ENVIRONMENTAL SETTING AND GEOLOGY

The climate in the Atlanta area is generally mild with a frost-free growing season of about 259 days a year (Ref. 11). Annual temperatures are highest during the three-month period of June, July, and August with an average of 28 days when the daytime high temperature exceeds 90°F. The highest recorded temperature between 1961 and 1990 was 105°F in July of 1980. The months of December, January, and February are the coldest months of the year with 41 days when the minimum temperatures were 32°F or less. The lowest recorded temperature between 1961 and 1990 was -8°F in January of 1985. The average annual mean temperature for Atlanta is 61.5°F for the reporting period 1961 to 1990 (Ref. 12). Rainfall varies from a high of 66-inches to a low of 40.50-inches with an average of approximately 50-inches in a typical year (Ref. 13). The mean annual lake evaporation in the area is 41 inches per year, yielding an estimated annual net precipitation of 9 inches (Ref. 14). The 2-year, 24-hour rainfall event for the area is approximately 4 inches (Ref. 15, p. 95).

The site is situated in a relatively level area at an elevation of approximately 850 feet above mean sea level (msl) surrounded by hills. The elevation of the surrounding area varies from a high of approximately 950 feet above msl to a low of 790 feet above msl (Ref. 1).

The facility is located in an industrial park bounded on the north by Hills Avenue (Ref. 2, p. 2). CSX Railroad tracks are located immediately to the east of the site, and a railroad spur runs east to west just south of the site (Ref. 1). The entire area surrounding the industrial park consists of densely populated residential areas in all directions (Ref. 1). An unnamed creek, which is a tributary to Woodall Creek, is located approximately 500 feet to the west of the site (Ref. 2, p. 4). Woodall Creek flows to the north for approximately one mile to Peachtree Creek. Peachtree Creek flows in a meandering path approximately ½-mile west where it is joined by Nancy Creek. Peachtree Creek continues another ½-mile to the southwest where it enters the Chattahoochee River (Ref. 1). A water intake for the City of Atlanta municipal water system is located just south of the confluence of Peachtree Creek and the Chattahoochee River (Ref. 16). Water from this intake is pumped to the southeast, in a topographically upgradient direction, to two reservoirs located approximately 1¼ miles southeast of the site (Refs. 1; 2, p. 5).

At the confluence with Peachtree Creek, the Chattahoochee River flows to the southwest. The next municipal water intake on the Chattahoochee River is located beyond the 15-mile TDL at the confluence with Sweetwater Creek. This intake provides water to the city of East Point (Ref. 16). The Chattahoochee River makes up the boundary between Fulton and Douglas counties and continues to flow to the southwest where it enters West Point Lake, then continues south towards the Gulf of Mexico (Refs. 1, 16).

The Atlanta urban area covers nine watershed units as cataloged by the United States Geological Survey (USGS), (Ref. 17). These watersheds are known as the Upper Oconee, Upper Ocmulgee, Upper Chattahoochee, Middle Chattahoochee-Lake Harding, Upper Flint, Coosawattee, Oostanaula, Etowah, and the Upper Tallapoosa. There are no principal aquifers listed as water resources for these watersheds within the 15-mile target distance limit (Ref. 17).

Fulton County is located within the Atlanta Plateau, which is part of the Piedmont geologic province. The Piedmont is a region of moderate-to-high-grade metamorphic rocks such as schists, gneisses, and igneous rocks such as granite (Ref. 18). Piedmont soils are commonly red due to the khandite-group

clays and iron oxides present from the intense weathering of feldspar-rich igneous and metamorphic rock (Ref. 19).

The major hydrogeologic units present in Fulton County are Crystalline-rock aquifers (Ref. 20). Groundwater in the Piedmont flows along faults and fractures, making it difficult to find but it can be locally abundant. Groundwater is transmitted through secondary openings along fractures, foliation, joints, contacts, or other features in the crystalline bedrock consisting of granite, gneiss, schist, and quartzite. These aquifers are not laterally extensive as the storage is in the regolith and fractures. Because of this, the hydrology of the Crystalline-rock aquifers is not well understood. Wells penetrating into the Crystalline-rock aquifers generally range from 40–600 feet in depth and yield 1–25 gallons per minute. Surficial aquifers are present throughout Georgia; but in the Piedmont, the surficial aquifers consist of soil, saprolite, stream alluvium, colluvium, and other surficial deposits (Ref. 21).

The 1989 PA report documented two water wells within the vicinity of the site. One well was located at the Aluminum Finishing Company located approximately ¼-mile south of the site. The depth to groundwater in this well was reported at 25 feet. The second well was located at the AZS Corporation (approximately 2.5 miles south of the facility) with a depth to groundwater of 21 feet (Ref. 2, p. 5). There was no documentation of residential groundwater wells in Fulton County within 4 miles of the site (Ref. 22). Water is available to all residents through the City of Atlanta municipal water system within a 4-mile radius of the site.

2.3 PREVIOUS RELEASES AND INVESTIGATIONS

The CERCLIS database listed the site discovery by the GAEPD as occurring on August 1, 1980 (Ref. 23). A Preliminary Assessment/RCRA Facility Assessment of ZEP Manufacturing Company report was prepared in 1989 (Ref. 2). The PA documented the site history and potential receptors, and included a visual site inspection (VSI) conducted by the GAEPD. The VSI identified potential sources and documented the current and past site activities (Ref. 2, p. 7). The VSI identified the following 4 solid waste management units (SWMUs) and provided their status:

- | | |
|-------------------------|--------|
| 1. Sludge Drying Bed | Active |
| 2. Waste Drum Storage | Active |
| 3. Neutralization Tank | Active |
| 4. Silo dust Collectors | Active |

No further assessments or investigations were documented to occur in the CERCLIS database, and the outcome of the PA was listed as "deferred to RCRA Subtitle C" on August 15, 1990 (Ref. 23).

The ZEP Manufacturing facility maintains an Air Emissions permit (SIP#2899-060-1068-5) through the GAEPD, Air Protection Branch. The facility was inspected by the Air Protection Branch on May 11, 1999. No violations were documented during the inspection. General comments were made that the hatches on mixing tanks should be closed and maintenance should be contacted concerning control devices (Ref. 5). The EPA TRI database identifies the specific compounds ZEP releases (Ref. 8, pp. 1-4).

2.4 SOURCE AREAS

The VSI conducted on May 24, 1989, focused on past and current waste streams generated at the facility (Ref. 2, pp. 7-12). None of the four SWMUs previously identified are eligible sources under the current HRS scenario. The sludge drying bed, neutralization tank, and silo dust collectors do not generate hazardous wastes, and the waste drum storage area is considered under the Generated Waste source. The sources identified for this reassessment are listed below with their estimated volumes (Refs. 2, 4, 6, 7, 8).

- 274 tons of Generated Waste containing: 1,1,1-trichloroethane, methanol, hexane, tetrachloroethane, toluene, trichloroethylene, xylene, benzene, cresol and mercury (Refs. 4, 7).
- 33 acres of on-site soils assuming same contaminants as present in waste.

3.0 PATHWAYS

This section discusses the groundwater migration, surface water migration, soil exposure, and air migration pathways. This section also discusses the targets associated with each pathway and draws pathway-specific conclusions.

3.1 GROUNDWATER MIGRATION PATHWAY

The groundwater migration pathway is not a pathway of concern due to the lack of a principal aquifer system. Municipal water is available to all Atlanta area residents, and is provided by a surface water

intake on the Chattahoochee River near Peachtree Creek (Ref. 16). Due to the lack of potential groundwater receptors and the lack of documentation indicating a release to groundwater, the groundwater migration pathway was not evaluated.

3.2 SURFACE WATER PATHWAY

The surface water pathway is the primary pathway of concern due to the potential to discharge contaminants into an unnamed tributary of Woodall Creek located approximately 500-feet west of the site (Ref. 2, p. 4). According to the PA, storm water flows to the west and enters Woodall Creek through a spillway. Woodall Creek flows to the north for approximately one-mile to Peachtree Creek. Peachtree Creek flows in a meandering path approximately ½-mile west where it is joined by Nancy Creek. Peachtree Creek continues another ½-mile to the southwest where it enters the Chattahoochee River (Ref. 1). A water intake for the City of Atlanta municipal water system is located just south of the confluence of Peachtree Creek and the Chattahoochee River (Ref. 16). Water from this intake is pumped to the southeast, in a topographically upgradient direction, to two reservoirs located approximately 1¼-miles southeast of the site (Refs. 1; 2, p. 5). The City of Atlanta municipal water system serves a population of 650,000 (Ref. 24).

The base discharge flow of Peachtree Creek is 2,500 cubic feet per second (cfs) (Ref. 25). The base discharge flow of the Chattahoochee River at Atlanta is 13,000 cfs (Ref. 25). The flow of Woodall Creek has not been documented, but is estimated to have a flow rate between 10 and 100 cfs (Ref. 1).

Sensitive environments identified along the surface water pathway include approximately 0.4 miles of wetlands on Peachtree Creek, just west of the confluence of Woodall Creek. There are also approximately 5 miles of wetlands mapped along the Chattahoochee River within the 15 mile TDL (Ref. 26).

Five protected species are found in Fulton County, Georgia. These include the Bachman's Sparrow, Bluestripe Shiner, Shinyrayed Pocketbook, Gulf Moccasinshell, and Highscale Shiner (Ref. 27). There are six protected species of plants found in Fulton County. These include the Georgia Aster, Pink Ladyslipper, Large-flowered Yellow Ladyslipper, Harper Heartleaf, Bay Starvine, and Piedmont Barren Strawberry (Ref. 27).

The TRIS database lists nine chemicals that were released to Woodall Creek in a one-time event in 1987. Since the facility is not permitted to release chemicals to surface water, the release is believed to be accidental. The chemicals include, 1,1,1-trichloroethane, cresol, dichloromethane, diethanolamine, ethylene glycol, formaldehyde, phosphoric acid, toluene, and xylene (Ref. 8, p. 4).

3.3 SOIL EXPOSURE PATHWAY

The only soil contamination documented at the site was petroleum hydrocarbons associated with two leaking USTs prior to 1982. One UST was reportedly used to store oil and the other used to store acid. The GAEPD collected two soil samples from the area that documented petroleum hydrocarbon contamination. In an Action Report dated June 4, 1982, the GAEPD requested that ZEP remove the contaminated soil and dispose of it in a permitted disposal site (Ref. 2, p. 3). According to the PA, the area where the USTs were located was backfilled with clean soil and was paved over. According to the GAEPD Underground Storage Tank Management Program there are currently no USTs registered at the facility (Ref. 28).

Land within 4-miles of the site is industrial and residential (Ref. 1). The facility is located in an industrial park and occupies approximately 33-acres (Ref. 2, p. 2). Populations were estimated at 2,658 within a one-mile radius of the site and 131,847 within a four-mile radius of the site (Ref. 29). The Mount Vernon School is located approximately 0.65 mile southwest of the site. There are also four additional schools within the 2-mile radius of the site (Ref. 2, p. 6).

3.4 AIR PATHWAY

The air pathway is not a concern at the ZEP facility and was not evaluated.. Fugitive and stack air emissions from the facility are permitted. These emissions are permitted through the GAEPD, Air Protection Branch which enforces the rules set forth by the Clean Air Act (Ref. 5). The PA and current records search has not identified any unregulated releases to air, and the facility is regularly inspected by the GAEPD, Air Protection Branch (Ref. 5). Potential receptors for the air pathway were documented as follows: 0-0.25 mile = 0; 0.25-0.5 mile = 2,658; 0.5 - 1 mile = 4,624; 1 - 2 mile = 17,632; 2-3 mile = 36,867; and 3-4 mile = 70,066 (Ref. 29).

4.0 CONCLUSIONS AND RECOMMENDATIONS

The ZEP facility is currently an active manufacturing facility that produces over 1,000 products including cleaning compounds, disinfectants, deodorants, dishwashing detergents, hand lotions, floor wax, and pesticides. Two soil samples were collected by the GAEPD in regard to two underground storage tanks located at the site in 1982. Documentation reveals that no other environmental samples have been collected from the facility. The GAEPD conducted a PA with VSI in 1989. The PA identified four potential source areas that were not applicable when evaluated under current HRS guidelines. However, two potential sources were identified and evaluated herein.

Two of the four pathways were evaluated for ZEP. Since the city of Atlanta provides residents and businesses potable water through a municipal system with a surface water source, the groundwater pathway was not evaluated. Furthermore, since all air emissions are permitted and there is no documentation of unregulated air emissions, the air pathway was not evaluated. Although no samples other than the two soil samples have been collected from the facility, pathway scores were generated using realistic worst-case assumptions of contamination. Based on the number of potential receptors, no pathway generated an elevated score. Because the site does not generate an appreciable HRS score, even in worst-case scenarios, No Further Remedial Action Planned (NFRAP) is recommended at this time for the ZEP facility.

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SITE INSPECTION WORKSHEETS

CERCLIS IDENTIFICATION NUMBER

GAD 003267192

SITE LOCATION			
SITE NAME: LEGAL, COMMON, OR DESCRIPTIVE NAME OF SITE ZEP Manufacturing Company			
STREET ADDRESS, ROUTE, OR SPECIFIC LOCATION IDENTIFIER 1310 Seaboard Industrial Blvd.			
CITY Atlanta	STATE Georgia	ZIP CODE 30318	TELEPHONE (404) 897-4644
COORDINATES: LATITUDE AND LONGITUDE 33° 48' 33" North, 84° 25' 43" West		TOWNSHIP, RANGE, AND SECTION	

OWNER/OPERATOR IDENTIFICATION					
OWNER ZEP Manufacturing Company			OPERATOR ZEP Manufacturing Company		
OWNER ADDRESS 1310 Seaboard Industrial Blvd.			OPERATOR ADDRESS P.O. Box 2015		
CITY Atlanta			CITY Atlanta		
STATE Georgia	ZIP CODE 30318	TELEPHONE	STATE Georgia	ZIP CODE 30301	TELEPHONE (404) 897-4644

SITE EVALUATION		
AGENCY/ORGANIZATION TN & Assoc., Inc. for Region 4 EPA Superfund Technical Assessment Team (STAT) contract		
INVESTIGATOR John Axelson		
CONTACT Matt Ellender		
ADDRESS 840 Kennesaw Ave., Suite 7		
CITY Marietta	STATE Georgia	ZIP CODE 30060
TELEPHONE (678) 355-5550		SUBMITTED April 2001

References: 1, 2, 3

GENERAL INFORMATION

Site Description and Operational History: Provide a brief description of the site and its operational history. State the site name, owner, operator type of facility and operations, size of property, active or inactive status, and years of waste generations. Summarize waste treatment, storage, or disposal activities that have or may have occurred at the site; note whether these activities are documented or alleged. Identify all source types and prior spills, floods, or fires. Summarize highlights of the PA and other investigations. Cite references.

The ZEP Manufacturing facility is located in an industrial park at 1310 Seaboard Industrial Boulevard within the city limits of Atlanta (see Figure 1). The geographic coordinates of the facility are 33° 48' 33" north latitude and 84° 25' 43" west longitude (Ref. 1). The overall size of the facility property is approximately 33 acres (Refs. 2, p. 2; 3).

According to the 1989 preliminary assessment report, National Service Industries, Incorporated of Atlanta, Georgia, constructed and began to operate the facility in 1956 (Ref. 2, p. 2). In 1970, ZEP Manufacturing Company, a subsidiary of National Service Industries, became the operator of the facility (Ref. 2, p.2). Current tax records indicate that National Service Industries is still the owner of the property (Ref. 3).

According to the 1989 preliminary assessment report the facility manufactures over 1000 products including cleaning compounds, deodorants, dishwashing detergents, hand lotion, floor wax, and pesticides (Ref. 2, p.2). These products are manufactured by purchasing bulk chemicals, blending them together, and repackaging the finished products (Ref. 2, p.3).

Regulatory records indicate that the ZEP Manufacturing facility is a large quantity generator of hazardous waste and reports waste generation under the Biennial Reporting System (BRS) (Ref. 4). According to the most recent BRS Facility Waste Detail Report, ZEP generated and shipped 274 tons of federal waste in 1997. The following amounts and types made up the 274 tons of waste: 4.675 tons of acidic aqueous waste; 20.36 tons of halogenated/nonhalogenated mixed solvents; 33.121 tons of low-solvent aqueous waste; 0.135 tons of inorganic solid waste; 122.584 tons of halogenated/nonhalogenated mixed solvents; and 92.674 tons of halogenated solvents (Ref. 4)

According to the Toxic Release Inventory System (TRIS) database maintained by the US EPA, ZEP has released approximately twenty chemicals into the air each year from 1987 to 1998. In 1998 (the most recent year that data is available) ZEP released 9,395 pounds of air emissions (Ref. 6). For a complete list of the type and quantity of chemicals released via air stack or fugitive air emissions, please refer to the EPA Envirofacts Report, *Chemicals Released to Air* (Ref. 7, pp.2-4). Air Emissions from the ZEP Manufacturing facility are regulated by Air Emissions permit (SIP#2899-060-1068-5) through the GAEPD, Air Protection Branch. The facility was inspected by the Air Protection Branch on May 11, 1999. No violations were documented during the inspection. General comments were made that the hatches on mixing tanks should be closed and maintenance should be contacted concerning control devices (Ref. 5).

Two underground storage tanks were removed from the site prior to 1982. The GAEPD collected soil samples on April 29, 1982, which indicated the presence of petroleum products in the vicinity of the former tank locations. The area has been backfilled with clean soil and paved over. (Ref. 2, p.3).

According to the Preliminary Assessment Report, a wastewater pipe plugged resulting in a wastewater discharge to a tributary of Woodall Creek. This release resulted in a consent order that was issued on February 21, 1986, that required corrective actions and a \$2000 penalty (Ref. 2, p.4).

In 1987 ZEP reported nine pounds of chemicals released to an unnamed feeder creek to Peachtree Creek (Ref. 8, p.4). Wastewater from the facility is sent to a pretreatment plant prior to discharge into the City of Atlanta sanitary sewer system, as a result, there are no direct discharges to surface water so the facility does not have an NPDES permit (Refs. 2, p. 3; 9).

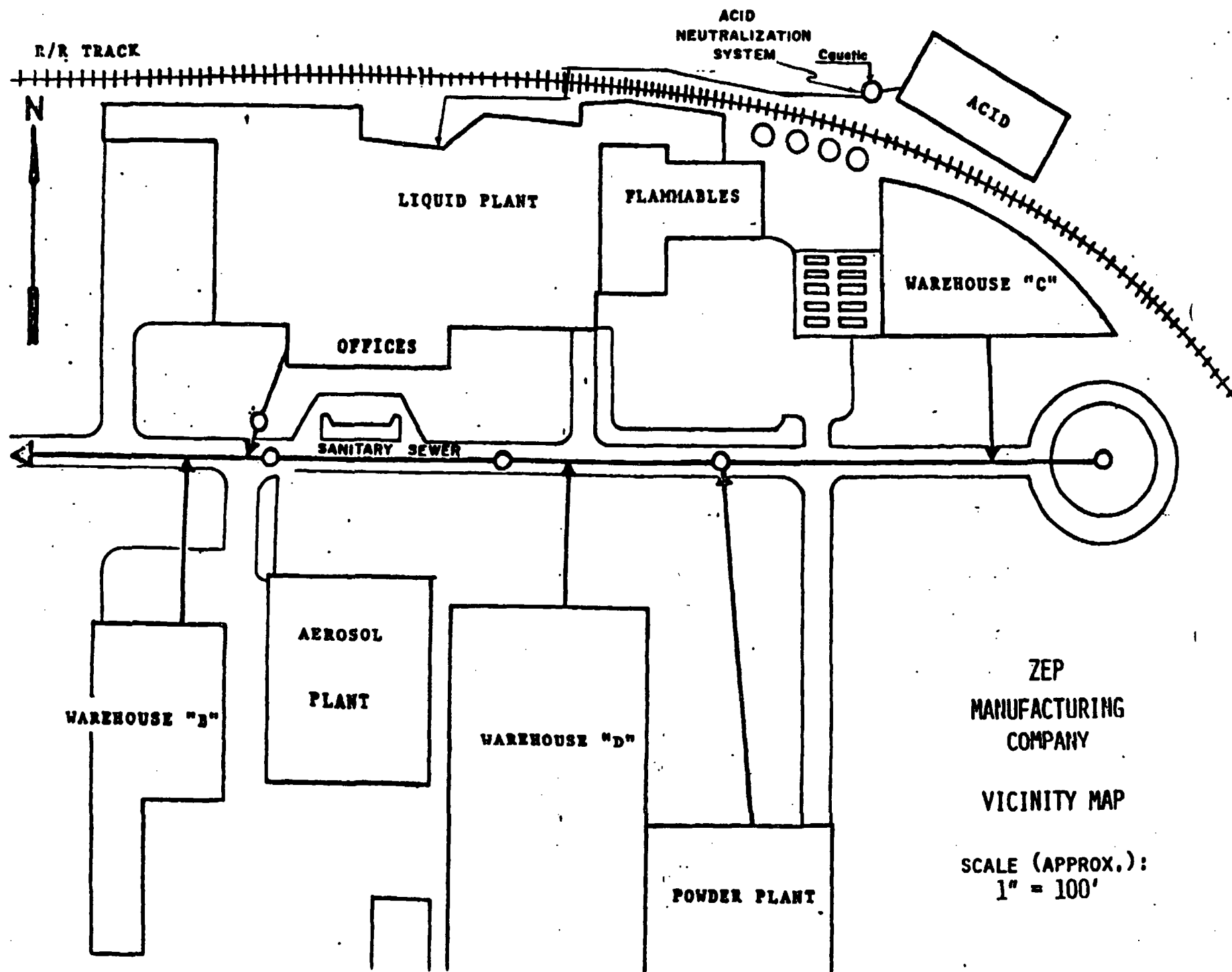
GENERAL INFORMATION (continued)

SITE SKETCH: Provide a sketch of the site. Indicate the pertinent features of the site and nearby environments including sources of wastes, areas of visible and buried wastes, buildings, residences, access roads, parking areas, fences, fields, drainage patterns, water bodies, vegetation, wells, sensitive environments, and other features.

SEE FOLLOWING PAGE

Diagram from the GAEPD Preliminary Assessment (1989)

C-5A



ZEP
MANUFACTURING
COMPANY

VICINITY MAP

SCALE (APPROX.):
1" = 100'

GENERAL INFORMATION (continued)

Source Descriptions: Describe all sources at the site. Identify source type and relate to waste disposal operations. Provide source dimensions and the best available waste quantity information. Describe the condition of sources and all containment structures. Cite references.

SOURCE TYPES

Landfill: A man-made (by excavation or construction) or natural hole in the ground into which wastes have come to be disposed by backfilling, or by contemporaneous soil deposition with waste disposal.

Surface Impoundment: A natural topographic depression, man-made excavation, or diked area, primarily formed from earthen materials (lined or unlined) and designed to hold an accumulation of liquid wastes, wastes containing free liquids, or sludges not backfilled or otherwise covered; depression may be wet with exposed liquid or dry if deposited liquid has evaporated, volatilized or leached; structures that may be described as lagoon, pond, aeration pit, settling point, tailings point, sludge pit; also a surface impoundment that has been covered with soil after the final deposition of waste materials (i.e., buried or backfilled).

Drum: A potable container designed to hold a standard 55-gallon volume of wastes.

Tank and Non-Drum Container: Any device, other than a drum, designed to contain an accumulation of waste that provides structural and its constructed primarily of fabricated materials (such as wood, concrete, steel, or plastic); any portable or mobile device in which waste is stored or otherwise handled.

Contaminated Soil: An area or volume of soil onto which hazardous substances have been spilled, spread, disposed, or deposited.

Pile: Any non-containerized accumulation above the ground surface of solid, non-flowing waste; includes open dumps. Some types of waste piles are:

- **Chemical Waste Pile:** A pile consisting primarily of discarded chemical products, by-products, radioactive wastes, or used or unused feedstocks.
- **Scrap Metal or Junk Pile:** A pile consisting primarily of scrap metal or discarded durable goods (such as appliances, automobiles, auto parts, batteries, etc.) composed of materials containing hazardous substances.
- **Tailing pile:** A pile consisting primarily of any combination of overburden from a mining operation and tailings from a mineral mining, beneficiation, or processing operation.
- **Trash Pile:** A pile consisting primarily of paper, garbage, or discarded non-durable goods containing hazardous substances.

Land Treatment: Landfarming or other method of waste management in which liquid wastes or sludges are spread over land and tilled, or liquids are injected at shallow depths into soils.

Other: Sources not in categories listed above.

GENERAL INFORMATION (continued)

Source Description: Include description of containment per pathway for ground water (see HRS Table 3-2), surface water (see HRS Table 4-2), and air (see HRS Tables 6-3 and 6-9).

Source: 274 tons of Generated Waste

Source Type: Waste Stream

Source: 33 acres of site soils

Source Type: Contaminated Soil

The generated waste, as reported for 1997, included 4.675 tons of acidic aqueous waste; 20.36 tons of halogenated/nonhalogenated mixed solvents; 33.121 tons of low-solvent aqueous waste; 0.135 tons of inorganic solid waste; 122.584 tons of halogenated/nonhalogenated mixed solvents; and 92.674 tons of halogenated solvents (Ref. 4).

The site soils are assumed to contain the same contaminants as those listed for generated waste and include: 1,1,1-trichloroethane, methanol, hexane, tetrachloroethane, toluene, trichloroethylene, xylene, benzene, cresol and mercury.

Hazardous Waste Quantity (HWQ) Calculations: SI Table 1 and 2 (See HRS Tables 2-5, 2-6 and 5-2).

Based on divisors assigned in Column 7, (page C-9)

$$274 \text{ tons generated waste} \times 2,000 \text{ lb./ton} = 548,000 \text{ lb} \quad 548,000 \text{ lb} \div 5000 = 109.60$$

$$33 \text{ acres contaminated soil} \quad 33 \text{ acres} \div 0.78 = 42.31$$

Site WQ Total = 151.91

Based on SI Table 2, Page C-10, the HWQ Score = 100

Attach additional pages, if necessary

HWQ = 100

Reference: 2, 4

SI TABLE 1: HAZARDOUS WASTE QUANTITY (HWQ) SCORES FOR SINGLE SOURCE SITES AND FORMULAS FOR MULTIPLE SOURCE SITES

(Column 1) TIER	(Column 2) Source Type	Single Source Sites (assigned HWQ scores)	
		(Column 3) HWQ = 10	(Column 4) HWQ = 100
A Hazardous Constituent Quantity	N/A	HWQ = 1 if Hazardous Constituent Quantity data are complete HWQ = 10 if Hazardous Constituent Quantity data are not complete	> 100 to 10,000 lbs
B Hazardous Wastestream Quantity	N/A	≤ 500,000 lbs	>500,000 to 50 million lbs
C Volume	Landfill	≤ 6.75 million ft ³ ≤ 250,000 yd ³	>6.75 million to 675 million ft ³ >250,000 to 25 million yd ³
	Surface impoundment	≤ 6,750 ft ³ ≤ 250 yd ³	>6,750 to 675,000 ft ³ >250 to 250,000 yd ³
	Drums	≤ 1,000 drums	>1,000 to 100,000 drums
	Tanks and non-drum containers	≤ 50,000 gallons	>50,000 to 5 million gallonsft ³
	Contaminated soil	≤ 6.75 million ft ³ ≤ 250,000 yd ³	>6.75 million to 675 million >250,000 to 25 million yd ³
	Pile	≤ 6,750 ft ³ ≤ 250 yd ³	>6,750 to 675,000 ft ³ >250 to 25,000 yd ³
	Other	≤ 6,750 ft ³ ≤ 250 yd ³	>6,750 to 675,000 ft ³ >250 to 25,000 yd ³
D Area	Landfill	≤ 340,000 ft ² ≤ 7.8 acres	>340,000 to 34 million ft ² >7.8 to 780 acres
	Surface impoundment	≤ 1,300 ft ² ≤ 0.029 acres	>1300 to 130,000 ft ² >0.029 to 2.9 acres
	Contaminated Soil	≤ 3.4 million ft ² ≤ 78 acres	>3.4 million to 340 million ft ² >78 to 7,800 acres
	Pile	≤ 1,300 ft ² ≤ 0.029 acres	>1,300 to 130,000 ft ² >0.029 to 2.9 acres
	Land Treatment	≤ 27,000 ft ² ≤ 0.62 acres	>27,000 to 2.7 million ft ² >0.62 to 62 acres

TABLE 1 (continued)

Single Source Sites (assigned HWQ scores)		Multiple Source Sites		
(Column 5) HWQ = 10,000	(Column 6) HWQ = 1,000,000	(Column 7) Divisors for Assigning Source WQ Values	(Column 2) Source Type	(Column 1) TIER
>10,000 to 1 million lbs	>1 million lbs	Lbs / 1	N/A	A Hazardous Constituent Quantity
>50 million to 5 billion lbs	>5 billion lbs	Lbs / 5,000	N/A	B Hazardous Wastestream Quantity
>6.75 million to 67.5 billion ft ³ >25 million to 2.5 billion yd ³ >675,000 to 67.5 million ft ³ >25,000 to 2.5 million yd ³ >100,000 to 10 million drums >5 million to 500 million gallons >675 million to 67.5 billion ft ³ >25 million to 2.5 billion yd ³ >675,000 to 67.5 million ft ³ >25,000 to 2.5 million yd ³ >675,000 to 67.5 million ft ³ >25,000 to 2.5 million yd ³	> 6.75 billion ft ³ > 2.5 billion yd ³ >67.5 million ft ³ >2.5 million yd ³ > 10 million drums > 500 million gallons >6.75 billion ft ³ >2.5 billion yd ³ >67.5 million ft ³ >2.5 million yd ³ >67.5 million ft ³ >2.5 million yd ³	ft ³ / 67,500 yd ³ / 2,500 ft ³ / 67.5 yd ³ / 2.5 drums / 10 gallons / 500 ft ³ / 67,500 yd ³ / 2,500 ft ³ / 67.5 yd ³ / 2.5 ft ³ / 67.5 yd ³ / 2.5	Landfill Surface impoundment Drums Tanks and non- drum containers Contaminated soil Pile Other	C Volume
>34 million to 3.4 billion ft ² >780 to 78,000 acres >130,000 to 13 million ft ² >2.9 to 290 acres >340 million to 34 billion ft ² >7,800 to 780,000 acres >130,000 to 13 million ft ² >2.9 to 290 acres >2.7 million to 270 million ft ² >62 to 6,200 acres	>3.4 billion ft ² > 78,000 acres >13 million ft ² > 290 acres > 3.4 billion ft ² > 780,000 acres > 13 million ft ² > 290 acres > 270 million ft ² > 6,200 acres	ft ² / 3,400 acres / 0.078 ft ² / 13 acres / 0.00029 ft ² / 34,000 acres / 0.78 ft ² / 13 acres / 0.00029 ft ² / 270 acres / 0.0062	Landfill Surface impoundment Contaminated Soil Pile Land Treatment	D Area

HAZARDOUS WASTE QUANTITY (HWQ) CALCULATION

For each migration pathway, evaluate HWQ associated with sources that are available (i.e., incompletely contained) to migrate to the pathway. (Note: If Actual Contamination Targets exist for ground water, surface water, or air migration pathways, assign the calculated HWQ score of 100, whichever is greater, as the HWQ score for the pathway.) For each source, evaluate HWQ for one or more of the four tiers SI Table 1, HRS Table 2-5) for which data exist: constituent quantity, wastestream quantity, source volume, and source area. Select the tier that gives the highest value as the source HWQ. Select the source volume HWQ rather than source area HWQ if data for both tiers are available.

Column 1 of SI Table 1 indicates the quantity tier. Column 2 lists source types for the four tiers. Columns 3, 4, 5 and 6 provide ranges of waste amount for sites with only one source corresponding to HWQ scores at the tops of the columns. Column 7 provides formulas to obtain source waste quantity values at sites with multiple sources.

1. Identify each source type.
2. Examine all waste quantity data available for each source. Record constituent quantity and waste stream mass or volume. Record dimensions of each source.
3. Convert source measurements to appropriate units for each tier to be evaluated.
4. For each source use the formulas in the last column of SI Table 1 to determine the waste quantity value for each tier that can be evaluated. Use the waste quantity value obtained from the highest tier as the quantity value for the source.
5. Sum the values assigned to each source to determine the total site waste quantity.
6. Assign HWQ score from SI Table 2 (HRS Table 2-6).

Note these exceptions to evaluate soil exposure pathway HWQ (see HRS Table 5-2):

- The divisor for the area (square feet) of a landfill is 34,000.
- The divisor for the area (square feet) of a pile is 34.
- Wet surface impoundments and tanks and non-drum containers are the only sources for which volume measurements are evaluated for the soil exposure pathway.

SI TABLE 2: HWQ SCORES FOR SITES

Site WQ Total	HWQ Score
0	0
1 ^a to 100	1 ^b
>100 to 10,000	100
>10,000 to 1 million	10,000
>1 million	1,000,000

^a If the WQ total is between 0 and 1, round it to 1.

^b If the hazardous constituent quantity data are not complete, assign the score of 10.

SI Table 3: Waste Characterization Worksheet

CONFIDENTIAL

SITE NAME: ZEP Manufacturing Company

REFERENCES:
4, 7, Preliminary Assessment, Superfund Chemical Data Matrix

SOURCES:

- 1 Generated Waste
- 2 _____
- 3 _____

Source Number	Hazardous Substance	Toxicity (Tox)	Ground Water Pathway		Surface Water Pathway											Air Pathway	
			Mobility (Mob) solid	Tox / Mob Value	Overland/Flood Migration						Groundwater to Surface Water					Tox./Mob.	
					Persis- tence (Per) Lake	Tox/Per	Bio- accumulati on (Bio) Potential	Tox/ Per/ Bio	Eco- toxicity (Eco) Fresh	Eco/ Per	Eco/Per/ Bio(env)	Tox/Mob/ Per	Tox/Mob/ Per/Bio	Eco/Mob/ Per	Eco/Mob/ Per/Bio	Gas	Particulate (.0002)
1	1,1,1-Trichloroethane	1	1	1	1	1	5	5	10	10	50	1	5	10	50	1	No
1	Methanol	1	1	1	1	1	1	1	10	10	5	1	1	10	5	1	No
1	Hexane	10	0.01	0.1	1	10	500.0	5,000	100	100	50000	0	50	1	500	10	No
1	Tetrachloroethylene	100	1	100	1	100	50	5,000	100	100	5000	100	5000	100	5000	100	No
1	Toluene	10	1	10	0.4	4	50	200	100	40	2000	4	200	40	2000	10	No
1	Trichloroethylene	10	1	10	1	10	50	500	100	100	5000	10	500	100	5000	10	No
1	Xylene (Mixed Isomers)	10	1	10	1	10	50	500	100	100	5000	10	500	100	5000	10	No
1	Benzene	100	1	100	0.4	40	5000	200,000	100	40	20000	40	200000	40	200000	100	No
1	Cresol	100	1	100	0.4	40	5	200	0	0	0	40	200	0	0	100	No
1	Mercury	10,000	0.01	100	1	10,000	50000	5.E+08	10,000	10,000	5.E+08	100	5.E+06	100	5.E+06	2000	2.0
				0		0		0		0	0	0	0	0	0		0.0
				0		0		0		0	0	0	0	0	0		0.0
				0		0		0		0	0	0	0	0	0		0.0
				0		0		0		0	0	0	0	0	0		0.0
				0		0		0		0	0	0	0	0	0		0.0

Ground Water Observed Release Substances Summary Table

On SI Table 4, list the hazardous substances associated with the site detected in ground water samples for that aquifer. Include only those substances directly observed or with concentrations significantly greater than background levels. Obtain toxicity values from the Superfund Chemical Data Matrix (SCDM). Assign mobility a value of 1 for all observed release substances regardless of the aquifer being evaluated. For each substance, multiply the toxicity by the mobility to obtain the toxicity/mobility factor value; enter the highest toxicity/mobility value for the aquifer in the space provided.

Ground Water Actual Contamination Targets Summary Table

If there is an observed release at a drinking water well, enter each hazardous substance meeting the requirements for an observed release by well and sample ID on SI Table 5 and record the detected concentration. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population using the well as a Level I target. If these percentages are less than 100% or all are N/A, evaluate the population using the well as a Level II target for that aquifer.

***Groundwater Pathway Not Evaluated**

SI TABLE 4: GROUND WATER OBSERVED RELEASE SUBSTANCE (BY AQUIFER)

Sample ID	Hazardous Substance	Bckgrd. Conc.	Toxicity/ Mobility	References
Highest Toxicity/Mobility				

SI TABLE 5: GROUND WATER ACTUAL CONTAMINATION TARGETS

Well ID: _____ Level I _____ Level II _____ Population Served _____ References _____

Sample ID	Hazardous Substance	Conc. (µg/L)	Benchmark Conc. (MCL or MCLG)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RfD	% of RfD
Highest Percent					Sum of Percents		Sum of Percents	

**GROUND WATER PATHWAY
GROUND WATER USE DESCRIPTION**

Describe Ground Water Use within 4 miles of the Site:

Describe generalized stratigraphy, aquifers, municipal and private wells

There were no domestic or municipal groundwater wells identified within a 4-mile radius of the site. The site is located within the Atlanta City limits, and the city provides treated water through the municipal water system to all area residents. Furthermore, there were no principal aquifers identified within a 4-mile radius of the site, as a result, the groundwater pathway was not evaluated.

Reference 17, 22, 24

Show Calculations of Ground Water Drinking Water Populations for each Aquifer:

Provide apportionment calculations for blended supply systems.

County average number of persons per household: _____ Reference 22, 24

There are no groundwater populations identified. All of the area residents are served by the Atlanta municipal water system, which obtains water through a surface intake on the Chattahoochee River.

Not Evaluated – No Targets Identified

GROUND WATER PATHWAY WORKSHEET

Score Data Type Refs

LIKELIHOOD OF RELEASE

1. OBSERVED RELEASE: If sampling data or direct observation support a release to the aquifer, assign a score of 550. Record observed release substances on SI Table 4.			
2. POTENTIAL TO RELEASE: Depth to aquifer: _____ feet. If sampling data do not support a release to the aquifer, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Optionally, evaluate potential to release according the HRS Section 3.			
LR=			

TARGETS

Are any wells part of a blended system? Yes _____ No _____ If yes, attach a page to show apportionment calculations.			
3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates that any target drinking water well for the aquifer has been exposed to a hazardous substance from the site, evaluate the factor score for the number of people served (SI Table 5). Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ Total =			
4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water wells for the aquifer or overlying aquifers that are not exposed to a hazardous substance from the site; record the population for each distance category in SI Table 6a or 6b. Sum the population values and multiply by 0.1.			
5. NEAREST WELL: Assign a score of 50 for any Level I Actual Contamination Targets for the aquifer or overlying aquifer. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Targets exist, assign the Nearest Well score from SI Table 6a or 6b. If no drinking water wells exist within 4 miles, assign 0.			
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA for the aquifer, or if a ground water observed release has occurred within a WHPA, assign a score of 20; assign 5 if neither condition applies but a WHPA is within 4 miles, otherwise assign 0.			
7. RESOURCES: Assign a score of 5 if one or more ground water resource applies; assign 0 if none applies. <ul style="list-style-type: none"> • Irrigation (5 acre minimum) of commercial food crops or commercial forage crops • Watering of commercial livestock • Ingredient in commercial food preparation • Supply for commercial aquaculture • Supply for a major or designated water recreation area, excluding drinking water use 			
SUM OF TARGETS T=			

SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUNDWATER TARGET POPULATIONS

SI TABLE 6a: OTHER THAN KARST AQUIFERS

Distance from site	Pop.	Nearest well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000		
0 to 1/4 mile		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455		
>1/4 to 1/2 mile		18	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122		
>1/2 to 1 mile		9	1	5	17	52	167	523	1,669	5,224	16,684	52,239	166,835	522,385		
> 1 to 2 miles		5	0.7	3	10	30	94	294	939	2,939	9,385	29,384	93,845	293,842		
>2 to 3 miles		3	0.5	2	7	21	68	212	678	2,122	6,778	21,222	67,777	212,219		
>3 to 4 miles		2	0.3	1	4	13	42	131	417	1,306	4,171	13,060	41,709	130,596		

Nearest Well =

SUM =

**SI TABLE 6 (From HRS TABLE 3-12): VALUES FOR POTENTIAL CONTAMINATION GROUND WATER TARGET POPULATIONS
(continued)**

SI Table 6b: Karst Aquifers

Distance from site	Pop.	Nearest well (choose highest)	Population Served by Wells within Distance Category												Pop. Value	Ref.
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000		
0 to 1/4 mile		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455		
>1/4 to 1/2 mile		20	2	11	33	102	324	1,013	3,233	10,122	32,325	101,213	323,243	1,012,122		
>1/2 to 1 mile		20	2	9	26	82	261	817	2,607	8,163	26,068	81,523	260,680	816,227		
> 1 to 2 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,523	260,680	816,227		
>2 to 3 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,523	260,680	816,227		
>3 to 4 miles		20	2	9	26	82	261	817	2,607	8,163	26,068	81,523	260,680	816,227		
Nearest Well =															SUM =	

GROUND WATER PATHWAY WORKSHEET (concluded)

WASTE CHARACTERISTICS	Score	Data Type	Does Not Apply																						
8. If any Actual Contamination Targets exist for the aquifer or overlying aquifers, assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if no Actual Contamination Targets exist, assign the hazardous waste quantity score calculated for sources available to migrate to ground water.																									
9. Assign the highest ground water toxicity/mobility value from SI Table 3 or 4.																									
10. Multiply the ground water toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below: (from HRS Table 2-7)																									
<table border="1"> <thead> <tr> <th>Product</th> <th>WC Score</th> </tr> </thead> <tbody> <tr><td>0</td><td>0</td></tr> <tr><td>>0 to < 10</td><td>1</td></tr> <tr><td>10 to < 100</td><td>2</td></tr> <tr><td>100 to <1,000</td><td>3</td></tr> <tr><td>1,000 to < 10,000</td><td>6</td></tr> <tr><td>10,000 to < 1E + 05</td><td>10</td></tr> <tr><td>1E + 05 to < 1E + 06</td><td>18</td></tr> <tr><td>1E + 06 to < 1E + 07</td><td>32</td></tr> <tr><td>1E + 07 to < 1E + 08</td><td>56</td></tr> <tr><td>1E + 08 or greater</td><td>100</td></tr> </tbody> </table>	Product	WC Score	0	0	>0 to < 10	1	10 to < 100	2	100 to <1,000	3	1,000 to < 10,000	6	10,000 to < 1E + 05	10	1E + 05 to < 1E + 06	18	1E + 06 to < 1E + 07	32	1E + 07 to < 1E + 08	56	1E + 08 or greater	100			
Product	WC Score																								
0	0																								
>0 to < 10	1																								
10 to < 100	2																								
100 to <1,000	3																								
1,000 to < 10,000	6																								
10,000 to < 1E + 05	10																								
1E + 05 to < 1E + 06	18																								
1E + 06 to < 1E + 07	32																								
1E + 07 to < 1E + 08	56																								
1E + 08 or greater	100																								
WC =																									

Multiply LR by T and by WC. Divide the product by 82,500 to obtain the ground water pathway score for each aquifer. Select the highest aquifer score. If the pathway score is greater than 100, assign 100.

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times W}{82,500}$$

(Maximum of 100)

*N/E

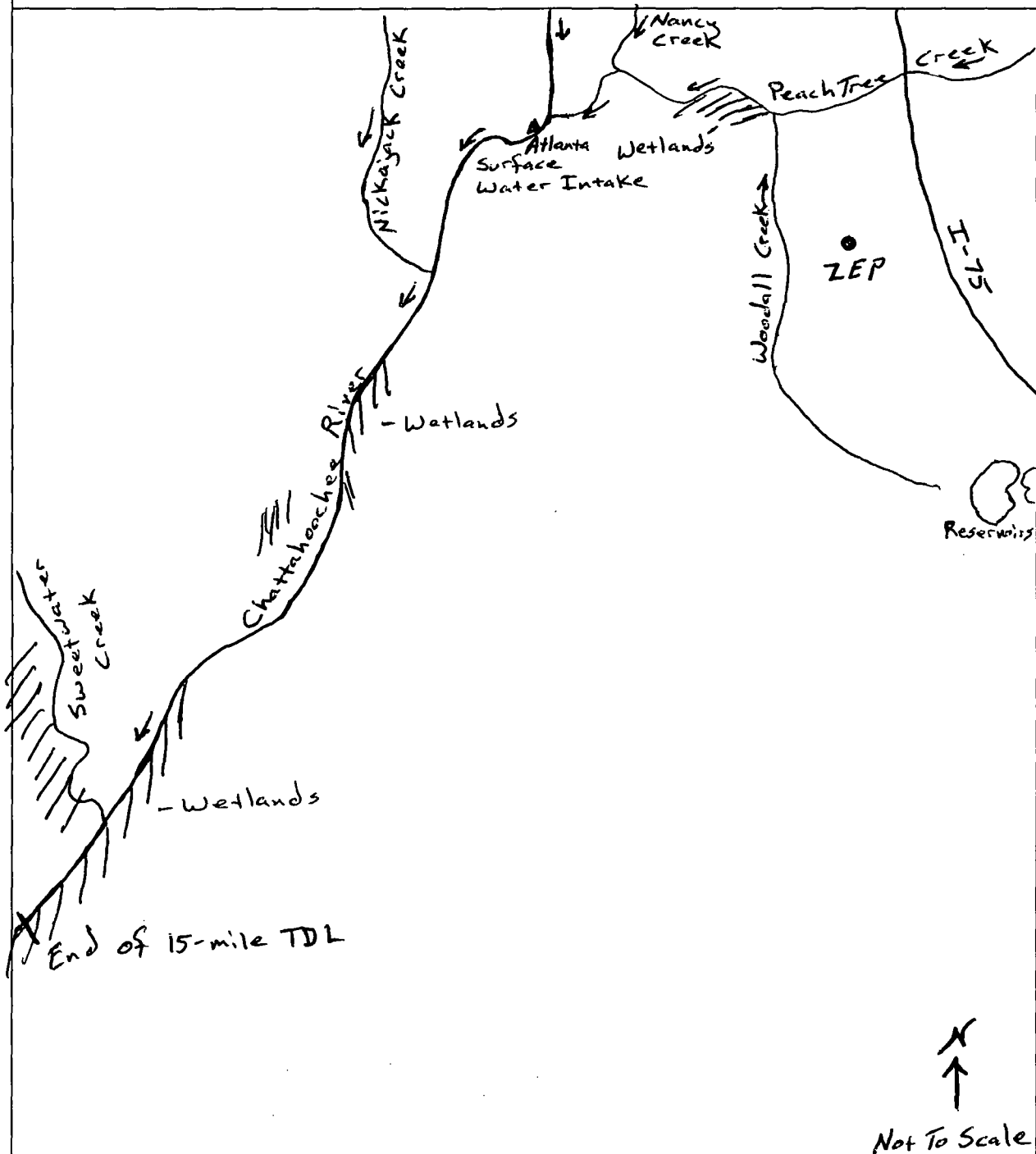
Not Evaluated

SURFACE WATER PATHWAY

CONFIDENTIAL

Sketch of the Surface Water Migration Route:

Label all surface water bodies. Include runoff route and drainage direction, probable point of entry, and 15-mile target distance limit. Mark sample locations, intakes, fisheries, and sensitive environments. Indicate flow directions, tidal influence, and rate.



SURFACE WATER PATHWAY

Surface Water Observed Release Substances Summary Table

On SI Table 7, list the hazardous substances detected in samples for the watershed, which can be attributed to the site. Include only those substances in observed releases (direct observation) or with concentration levels significantly above background levels. Obtain toxicity, persistence, bioaccumulation potential, and ecotoxicity values from SCDM. Enter the highest toxicity/persistence, toxicity/persistence/bioaccumulation, and ecotoxicity/persistence/ecobioaccumulation values in the spaces provided.

- TP = Toxicity x Persistence
- TPB = TP x Bioaccumulation
- EP = Ecotoxicity x Persistence
- ETPB = EP x Bioaccumulation

Drinking Water Actual Contamination Targets Summary Table

For an observed release at or beyond a drinking water intake, on SI Table 8 enter each hazardous substance by sample ID and the detected concentration. For surface water sediment samples detecting a hazardous substance at or beyond an intake, evaluate the intake as Level II contamination. Obtain benchmark, cancer risk, and reference dose concentrations for each substance from SCDM. For MCL and MCLG benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages of the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the population served by the intake as a Level I target. If the percentages are less than 100%, or all are N/A, evaluate the population served by the intake as a Level II target.

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SI TABLE 7: SURFACE WATER OBSERVED RELEASE SUBSTANCES

SAMPLE ID	HAZARDOUS SUBSTANCE	CONCENTRATION	BKG / CONTROL CONCENTRATIONS	TOXICITY/ PERSISTENCE	TOXICITY/PERSIS/ BIOACCUM.	ECOTOXICITY/ PERSIS/ ECOBIOACCUM	REFERENCES
HIGHEST VALUES							

SI TABLE 8: SURFACE WATER DRINKING WATER ACTUAL CONTAMINATION TARGETS

Intake ID: _____ Sample Type: _____ Level I _____ Level II _____ Population Served _____ References: _____

SAMPLE ID	HAZARDOUS SUBSTANCE	CONCENTRATION (µ/L)	BENCHMARK CONC. (MCL OR MCLG)	% OF BENCHMARK	CANCER RISK CONC.	% OF CANCER RISK CONC.	RfD	% OF RfD
			HIGHEST PERCENT		SUM OF PERCENTS		SUM OF PERCENTS	

Intake ID: _____ Sample Type: _____ Level I _____ Level II _____ Population Served _____ References: _____

SAMPLE ID	HAZARDOUS SUBSTANCE	CONCENTRATION (µ/L)	BENCHMARK CONC. (MCL OR MCLG)	% OF BENCHMARK	CANCER RISK CONC.	% OF CANCER RISK CONC.	RfD	% OF RfD
			HIGHEST PERCENT		SUM OF PERCENTS		SUM OF PERCENTS	

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**SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET**

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**LIKELIHOOD OF RELEASE –
OVERLAND/FLOOD MIGRATION**

OVERLAND/FLOOD MIGRATION	SCORE	REFS												
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7														
2. POTENTIAL TO RELEASE: Distance to surface water: <u>500</u> (Feet). If sampling data do not support a release to surface water in the watershed, use the table below to assign a score from the table below based on distance to surface water and flood frequency. <table><tr><td>Distance to surface water <2500 feet</td><td>500</td></tr><tr><td>Distance to surface water >2500 feet, and:</td><td></td></tr><tr><td> Site in annual or 10-yr floodplain</td><td>500</td></tr><tr><td> Site in 100-yr floodplain</td><td>400</td></tr><tr><td> Site in 500-yr floodplain</td><td>300</td></tr><tr><td> Site outside 500-yr floodplain</td><td>100</td></tr></table> <p>Optionally, evaluate surface water potential to release according to HRS Section 4.1.2.1.2</p>	Distance to surface water <2500 feet	500	Distance to surface water >2500 feet, and:		Site in annual or 10-yr floodplain	500	Site in 100-yr floodplain	400	Site in 500-yr floodplain	300	Site outside 500-yr floodplain	100	500	1
Distance to surface water <2500 feet	500													
Distance to surface water >2500 feet, and:														
Site in annual or 10-yr floodplain	500													
Site in 100-yr floodplain	400													
Site in 500-yr floodplain	300													
Site outside 500-yr floodplain	100													
LR =	500													

**LIKELIHOOD OF RELEASE –
GROUNDWATER TO SURFACE WATER MIGRATION**

	SCORE	REFS
1. OBSERVED RELEASE: If sampling data or direct observation support a release to surface water in the watershed, assign a score of 550. Record observed release substances on SI Table 7 NOTE: Evaluate groundwater to surface water migration only for a surface water body that meets all of the following conditions: <ol style="list-style-type: none"> 1. A portion of the surface water is within 1 mile of site sources having a containment factor greater than 0. 2. No aquifer discontinuity is established between the source and the above portion of the surface water body. 3. The top of the uppermost aquifer is at or above the bottom of the surface water. <p>Elevation of top of uppermost aquifer: _____</p> <p>Elevation of bottom of surface water body: _____</p>	Not Used	
2. POTENTIAL TO RELEASE: Use the ground water potential to release. Optionally, evaluate surface water potential to release according to HRS Section 3.1.2.		
LR =		

**SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT WORKSHEET (CONTINUED)**

DRINKING WATER THREAT TARGETS				SCORE	REFS								
<p>Record the water body type, flow, and number of people served by each drinking water intake within the target distance limit in the watershed. If there is no drinking water intake within the target distance limit, assign 0 to factors 3, 4, and 5.</p> <table border="1"> <thead> <tr> <th>Intake Name</th> <th>Water Body Type</th> <th>Flow</th> <th>People Served</th> </tr> </thead> <tbody> <tr> <td>City of Atlanta</td> <td>Chattahoochee River</td> <td>13,000 cfs</td> <td>650,000</td> </tr> </tbody> </table>				Intake Name	Water Body Type	Flow	People Served	City of Atlanta	Chattahoochee River	13,000 cfs	650,000		
Intake Name	Water Body Type	Flow	People Served										
City of Atlanta	Chattahoochee River	13,000 cfs	650,000										
<p>Are any intakes part of a blended system? Yes _____ No <u>x</u> If yes, attach a page to show apportionment calculations.</p> <p>3. ACTUAL CONTAMINATION TARGETS: If analytical evidence indicates a drinking water intake has been exposed to a hazardous substance from the site, list the intake name and evaluate the factor score for the drinking water population (SI Table 8).</p> <p>_____</p> <p>Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ Total = _____</p>				0	16, 22, 24, 25								
<p>4. POTENTIAL CONTAMINATION TARGETS: Determine the number of people served by drinking water intakes for the watershed that have not been exposed to a hazardous substance from the site. Assign the population values from SI Table 9. Sum the values and multiply by 0.1.</p>				5.2	24								
<p>5. NEAREST INTAKE: Assign a score of 50 for any Level I Actual Contamination Drinking Water Targets for the watershed. Assign a score of 45 if there are Level II targets for the watershed, but no Level I targets. If no Actual Contamination Drinking Water Targets exist, assign a score for the intake nearest the PPE from SI Table 9. If no drinking water intakes exist, assign 0.</p>				0									
<p>6. RESOURCES: Assign a score of 5 if one or more surface water resource applies; assign 0 if none applies.</p> <ul style="list-style-type: none"> • Irrigation (5 acre minimum) of commercial food or commercial forage crops • Watering of commercial livestock • Ingredient in commercial food preparation • Major or designated water recreation area, excluding drinking water use 				5	1								
SUM OF TARGETS T =				10.2									

SI TABLE 9 (FROM HRS TABLE 4-14): DILUTION-WEIGHTED POPULATION VALUES FOR POTENTIAL CONTAMINATION FOR SURFACE WATER MIGRATION PATHWAY

Type of Surface Water Body ^b	Pop.	Nearest Intake	Number of People ^a														Pop. Value
			0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1000	1001 to 3000	3001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	3,000,001 to 10,000,000	
Minimal Stream (<10 cfs)		20	0	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455	5,213,590	
Small to moderate stream (10 to 100 cfs)		2	0	0.4	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,245	521,359	
Moderate to large stream (>100 to 1,000 cfs)		0	0	0.04	0.2	0.5	2	5	16	52	163	521	1,633	5,214	16,325	52,136	
Large stream to river (>1,000 to 100,000 cfs)		0	0	0.004	0.02	0.05	0.2	0.5	2	5	16	52	163	521	1,632	5,214	
Large river (>10,000 to 100,000 cfs)	650,000	0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2	5	16	52	163	521	52
Very large river (>100,000 cfs)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	0.5	2	5	16	52	
Shallow ocean zone or Great Lake (Depth <20 feet)		0	0	0	0.002	0.005	0.02	0.05	0.2	0.5	2	5	16	52	163	521	
Moderate ocean zone or Great Lake (Depth 20 to 200 feet)		0	0	0	0	0.001	0.002	0.005	0.02	0.05	0.2	0.5	2	5	16	52	
Deep ocean zone or Great Lake (depth >200 feet)		0	0	0	0	0	0.001	0.003	0.008	0.03	0.08	0.3	1	3	8	26	
3-mile mixing zone in quiet flowing river (≥10 cfs)		10	0	2	9	26	82	261	817	2,607	8,163	26,068	81,623	260,680	816,227	2,606,795	
Nearest Intake =		0	Sum =														52

^aRound the number of people to nearest integer. Do not round the assigned dilution-weighted population value to nearest integer.

^bTreat each lake as a separate type of water body and assign it a dilution-weighted population value using the surface water body type with the same dilution weight from Table 4-13 as the lake. If drinking water is withdrawn from coastal tidal water or the ocean, assign a dilution-weighted population value to it using the surface water body type with the same dilution weight from Table 4-13 as the coastal tidal water or the ocean zone.

Refs. 1, 16, 22, 24

SURFACE WATER PATHWAY**Human Food Chain Actual Contamination Targets Summary Table**

On SI Table 10, list the hazardous substances detected in sediment, aqueous, sessile benthic organism tissue, or fish tissue samples (taken from fish caught within the boundaries of the observed release) by sample ID and concentration. Evaluate fisheries within the boundaries of observed release detected by sediment or aqueous samples as Level II, if at least one observed release substance has a bioaccumulation potential factor value of 500 or greater (See SI Table 7). Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For FDAAL benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentage for the substances listed. If benchmark, cancer risk, or reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate this portion of the fishery as subject to Level I concentrations. If the percentages are less than 100% or all are N/A, evaluate the fishery as a Level II target.

Sensitive Environment Actual Contamination Targets Summary Table

On SI Table 11, list each hazardous substance detected in aqueous or sediment samples at or beyond wetlands or a surface water sensitive environment by sample ID. Record the concentration. If contaminated sediments or tissues are detected at or beyond a sensitive environment, evaluate the sensitive environment as Level II. Obtain benchmark concentrations from SCDM. For AWQC/AALAC benchmarks, determine the highest percentage of the benchmark of the substances detected in aqueous samples. If benchmark concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage equals or exceeds 100%, evaluate that part of the sensitive environment subject to Level I concentrations. If the percentage is less than 100%, or all are N/A, evaluate the sensitive environment as Level II.

SURFACE WATER PATHWAY (CONTINUED)

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SI TABLE 10: HUMAN FOOD CHAIN ACTUAL CONTAMINATION TARGETS FOR WATERSHED

Fishery ID: _____ Sample Type: _____ Level I _____ Level II _____ References:

Sample ID	Hazardous Substance	Concentration	Benchmark Concentration (FDAAL)	% of Benchmark	Cancer Risk Concentration	% of Cancer Risk Concentration	Reference Dose (RfD)	% of RfD
HIGHEST PERCENT					SUM OF PERCENTS		SUM OF PERCENTS	

SI TABLE 11: SENSITIVE ENVIRONMENT ACTUAL CONTAMINATION TARGETS FOR WATERSHED

Environment ID: _____ Sample Type: _____ Level I _____ Level II _____ Environment Value: _____

Sample ID	Hazardous Substance	Concentration	Benchmark Concentration (AWQC or AALAC)	% of Benchmark	References
HIGHEST PERCENT					

Environment ID: _____ Sample Type: _____ Level I _____ Level II _____ Environment Value: _____

Sample ID	Hazardous Substance	Concentration	Benchmark Concentration (AWQC or AALAC)	% of Benchmark	References
HIGHEST PERCENT					

SURFACE WATER PATHWAY (CONTINUED)

CONFIDENTIAL

HUMAN FOOD CHAIN THREAT TARGETS

SCORE

REFS

Record the water body type and flow for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a score of 0 at the bottom of this page.

Fishery Name <u>Woodall Creek</u>	Water Body <u>River</u>	Flow <u>10-100 cfs</u>
Species <u>Pan fish</u>	Production <u>Greater than zero</u>	
Species <u>Catfish</u>	Production <u>Greater than zero</u>	
Fishery Name <u>Peachtree Creek</u>	Water Body <u>River</u>	Flow <u>2,500 cfs</u>
Species <u>Catfish</u>	Production <u>Greater than zero</u>	
Species <u>Panfish</u>	Production <u>Greater than zero</u>	
Fishery Name <u>Chattahoochee River</u>	Water Body <u>River</u>	Flow <u>13,000 cfs</u>
Species <u>Catfish</u>	Production <u>Greater than zero</u>	
Species <u>Panfish</u>	Production <u>Greater than zero</u>	

1, 25

FOOD CHAIN INDIVIDUAL

7. ACTUAL CONTAMINATION FISHERIES:

If analytical evidence indicates that a fishery has been exposed to a hazardous substance with a bioaccumulation factor greater than or equal to 500 (SI Table 10), assign a score of 50 if there is a Level I fishery. Assign a 45 if there is a Level II fishery, but no Level I fishery.

8. POTENTIAL CONTAMINATION FISHERIES:

If there is a release of a substance with a bioaccumulation factor greater than or equal to 500 to a watershed containing fisheries within the target distance limit, but there are no Level I or Level II fisheries, assign a score of 20.

If there is no observed release to the watershed, assign a value for the potential contamination fisheries from the table below using the lowest flow at all fisheries within the target distance limit:

LOWEST FLOW	FCI VALUE
< 10 cfs	20
10 to 100 cfs	2
> 100cfs, coastal tidal waters, oceans, or Great Lakes	0
3-mile mixing zone in quiet flowing river	10

2

1

FCI VALUE =

2

SUM OF TARGETS T =

2

SURFACE WATER PATHWAY (CONTINUED)

CONFIDENTIAL

ENVIRONMENTAL THREAT WORKSHEET

When measuring length of wetlands that are located on both sides of a surface water body, sum both frontage lengths. For a sensitive environment that is more than one type, assign a value for each type.

ENVIRONMENTAL THREAT TARGETS

SCORE

REFS

Record the water body type and flow for each surface water sensitive environment within the target distance (See SI Table 12). If there is no sensitive environment within the target distance limit, assign a score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
<u>Woodall Creek</u>	<u>River</u>	<u>10 to 100cfs</u>
<u>Peachtree Creek</u>	<u>River</u>	<u>2,500cfs</u>
<u>Chattahoochee River</u>	<u>River</u>	<u>13,000cfs</u>

25, 27

9. **ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS:** If sampling data or direct observation indicate any sensitive environment has been exposed to a hazardous substance from the site, record this information on SI Table 11, and assign a factor value for the environment (SI Tables 13 and 14).

Environment Name	Environment Type (SI Tables 13 & 14)	Environment Value	Multiplier 10 for level I 1 for Level II	Product

Sum =

10. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS:

Flow	Dilution Weight (SI Table 12)	Environment Type (SI Tables 13 & 14)	Environment Value	Potential Contaminant Multiplier	Product
<100 cfs	0.1	>0.1 miles of Wetlands in Woodall Creek	25	0.1	0.25
2,500 cfs	0.001	1-mile of Wetlands in Peachtree Creek	25	0.1	.0025
13,000cfs	0.0001	4-miles of Wetlands in Chattahoochee River	150	0.1	.0015
cfs					

0.254

1, 25, 26

Sum =

0.254

SUM OF TARGETS T =

0.254

**SI TABLE 12 (HRS TABLE 4-13):
SURFACE WATER DILUTION WEIGHTS**

TYPE OF SURFACE WATER BODY		ASSIGNED DILUTION WEIGHT
DESCRIPTOR	FLOW CHARACTERISTICS	
Minimal stream	<10 cfs	1
Small to moderate stream	10 to 100 cfs	0.1
Moderate to large stream	>100 to 1,000 cfs	0.01
Large stream to river	>1,000 to 10,000 cfs	0.001
Large river	>10,000 to 100,000 cfs	0.0001
Very large river	>100,000 cfs	0.00001
Coastal tidal waters	Flow not applicable; depth not applicable	0.001
Shallow ocean zone or Great Lake	Flow not applicable; depth less than 20 feet	0.001
Moderate depth ocean or Great Lake	Flow not applicable; depth 20 to 200 feet	0.0001
Deep ocean zone or Great Lake	Flow not applicable; depth > 200 feet	0.000005
3-mile mixing zone in quiet flowing river	10 cfs or greater	0.5

**SI TABLE 13 (HRS TABLE 4-23):
SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES**

SENSITIVE ENVIRONMENT	ASSIGNED VALUE
Critical habitat for Federal designated endangered or threatened species Marine Sanctuary National Park Designated Federal Wilderness Area Ecologically important areas identified under the Coastal Zone Wilderness Act Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes) National Monument (air pathway only) National Seashore Recreation Area National Lakeshore Recreation Area	100
Habitat known to be used by Federal designated or proposed endangered or threatened species National Preserve National or State Wildlife Refuge Unit of Coastal Barrier Resources System Coastal Barrier (undeveloped) Federal land designated for the protection of natural ecosystems Administratively Proposed Federal Wilderness Area Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary Migratory pathways and feeding areas critical for the maintenance of anadromous fish species within river reaches or areas in lakes or coastal tidal waters in which the fish spend extended periods of time Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding National river reach designated as recreational	75
Habitat known to be used by State designated endangered or threatened species Habitat known to be used by a species under review as to its Federal endangered or threatened status Coastal Barrier (partially developed) Federally designated Scenic or Wild River	50
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities	25
State designated areas for the protection of maintenance of aquatic life under the Clean Water Act	5
Wetlands See SI Table 14 (Surface Water Pathway) or SI Table 23 (Air Pathway)	

**SI TABLE 14 (HRS TABLE 4-24):
SURFACE WATER WETLANDS FRONTAGE VALUES**

Total Length of Wetlands	Assigned Value
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

**SURFACE WATER PATHWAY (CONCLUDED)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

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**SURFACE WATER PATHWAY (CONCLUDED)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

WASTE CHARACTERISTICS**SCORE**

14. If an Actual Contamination Target (drinking water, human food chain, or environmental threat) exists for the watershed, assign the calculated hazardous waste quantity score, or a score of 100, whichever is greater.				100
15. Assign the highest value from SI Table 7 (observed release) or SI Table 3 (no observed release) for the hazardous substance waste characterization factors below. Multiply each by the surface water hazardous waste quantity score and determine the waste characteristics score for each threat.				
	Substance Value X	HWQ =	Product	WC Score from Table below
Drinking Water Threat Toxicity/Persistence	10,000	100	1E+06	max = 100 32
Food Chain Threat Toxicity/Persistence/Bioaccumulation	5E+08	100	5E+10	max = 1000 320
Environmental Threat Ecotoxicity/Persistence/Ecobioaccumulation	5E+08	100	5E+10	max = 1000 320
PRODUCT	WC SCORE			
0	0			
>0 to <10	1			
10 to <100	2			
100 to <1,000	3			
1,000 to <10,000	6			
10,000 to <1E + 05	10			
1E + 05 to <1E + 06	18			
1E + 06 to <1E + 07	32			
1E + 07 to <1E + 08	56			
1E + 08 to <1E + 09	100			
1E + 09 to <1E + 10	180			
1E + 10 to <1E + 11	320			
1E + 11 to <1E + 12	560			
1E + 12 or greater	1,000			

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score $LR \times T \times WC$ 82,500
Drinking Water	500	10.2	32	(max = 100) 2.0
Human Food Chain	500	2	320	(max = 100) 3.88
Environmental	500	0.254	320	(max = 60) 0.49

SURFACE WATER PATHWAY SCORE
(DRINKING WATER THREAT + HUMAN FOOD CHAIN THREAT + ENVIRONMENTAL THREAT)

(max = 100)

6.37

SOIL EXPOSURE PATHWAY

If there is no observed contamination (e.g, ground water plume with no known surface source), do not evaluate the soil exposure pathway. Discuss evidence for no soil exposure pathway.

Soil Exposure Resident Population Targets Summary

For each property (duplicate page 35 as necessary):

If there is an area of observed contamination on the property and within 200 feet of a residence, school, or day care center, enter on Table 15 each hazardous substance by sample ID. Record the detected concentration. Obtain cancer risk, and reference dose concentrations from SCDM. Sum the cancer risk and reference dose percentages for the substance, enter N/A for the percentage. If the percentage sum calculated for cancer risk or reference dose equals or exceeds 100%, evaluate the residents and students as Level I. If both percentages are less than 100% or all are N/A, evaluate the targets as Level II.

SI TABLE 15: SOIL EXPOSURE RESIDENT POPULATION TARGETS

Residence ID: _____ Level I _____ Level II _____ Population _____

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	%Cancer Risk Conc.	RID	% of RID	Toxicity Value	References
HIGHEST PERCENT					SUM OF PERCENTS		SUM OF PERCENTS	

Residence ID: _____ Level I _____ Level II _____ Population _____

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	%Cancer Risk Conc.	RID	% of RID	Toxicity Value	References
HIGHEST PERCENT					SUM OF PERCENTS		SUM OF PERCENTS	

Residence ID: _____ Level I _____ Level II _____ Population _____

Sample ID	Hazardous Substance	Conc. (mg/kg)	Cancer Risk Concentration	%Cancer Risk Conc.	RID	% of RID	Toxicity Value	References
HIGHEST PERCENT					SUM OF PERCENTS		SUM OF PERCENTS	

SOIL EXPOSURE PATHWAY WORKSHEET

RESIDENT POPULATION THREAT

LIKELIHOOD OF EXPOSURE	SCORE	DATA TYPE	REFS
1. OBSERVED CONTAMINATION: If evidence indicates presence of observed contamination (depth of 2 feet or less), assign a score of 550; otherwise, assign a 0. Note that a likelihood of exposure score of 0 results in a soil pathway score of 0.	550	Assumed contaminated soil present	2
LE =	550		

TARGETS

2. RESIDENT POPULATION: Determine number of people living or attending school or daycare on a property with an area of observed contamination and whose residence, school, or day care center, respectively is on or within 200 feet of the area of observed contamination.													
Level I: _____ people x 10 = _____ Level II: _____ people x 1 = _____ Sum=													
3. RESIDENT INDIVIDUAL: Assign a score of 50 if any Level I resident population exists. Assign a score of 45 if there are Level II targets but no Level I targets. IF no resident population exists (i.e. no Level I or Level II targets), assign 0 (HRS Section 5.1.3).													
4. WORKERS: Assign a score from the table below for the total number of workers at the site and nearby facilities with areas of observed contamination associated with the site. <table> <tr> <th>Number of Workers</th><th>Score</th></tr> <tr> <td>0</td><td>0</td></tr> <tr> <td>1 to 100</td><td>5</td></tr> <tr> <td>101 to 1,000</td><td>10</td></tr> <tr> <td>> 1,000</td><td>15</td></tr> </table>	Number of Workers	Score	0	0	1 to 100	5	101 to 1,000	10	> 1,000	15	10	Estimated	
Number of Workers	Score												
0	0												
1 to 100	5												
101 to 1,000	10												
> 1,000	15												
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value for each terrestrial sensitive environment (SI Table 16) in an area of observed contamination.													
<table> <tr> <th>Terrestrial Sensitive Environment Type</th><th>Value</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Terrestrial Sensitive Environment Type	Value											
Terrestrial Sensitive Environment Type	Value												
6. RESOURCES: Assign a score of 5 if any one or more of the following resources is present on an area of observed contamination at the site: assign 0 if none applies. <ul style="list-style-type: none"> • Commercial agriculture • Commercial silvaculture • Commercial livestock production or commercial livestock grazing 													
Total of Targets T =	10												

**SI TABLE 16 (HRS TABLE 5-5): SOIL EXPOSURE PATHWAY
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES**

TERRESTRIAL SENSITIVE ENVIRONMENT	ASSIGNED VALUE
Terrestrial critical habitat for Federal designated and endangered or threatened species National Park Designated Federal Wilderness Area National Monument	100
Terrestrial habitat known to be used by Federal designated or proposed threatened or endangered species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by State designated endangered or threatened species Terrestrial habitat used by species under review for Federal designated endangered or threatened status	50
State lands designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

SOIL EXPOSURE PATHWAY WORKSHEET NEARBY POPULATION THREAT

LIKELIHOOD OF EXPOSURE	SCORE	DATA TYPE	REF
7. Attractiveness/Accessibility (from SI Table 17 or HRS Table 5-6) Value: <u>10</u> Area of Contamination (from SI Table 18 or HRS Table 5-7) Value: <u>100</u> ³ Likelihood of Exposure (from SI Table 19 or HRS Table 5-8)	125		2
LE =	125		

Note: if there is no area of observed contamination: LE = 0.

³ A worst-case scenario of 33contaminated acres was used (no samples have been collected from site).

TARGETS	SCORE	DATA TYPE	REF
8. Assign a score of 0 if Level I or Level II resident individual has been evaluated or if no individuals within 1/4 mile travel distance of an area of observed contamination. Assign a score of 1 if nearby population is within 1/4 mile travel distance and no Level I or Level II resident population has been evaluated.	0		
9. Determine the population within 1 mile travel distance that is not exposed to a hazardous substance from the site (i.e. properties that are not determined to be Level I or Level II); record the population for each distance category in SI Table 20 (HRS Table 5-10). Sum the population values and multiply by 0.1.	5.3		29
T =	5.3		

**S1 TABLE 17 (HRS TABLE 5-6)
ATTRACTIVENESS/ACCESSIBILITY VALUES**

Area of Observed Contamination	Assigned Value
Designated recreational area	100
Regularly used for public recreation (for example, vacant lots in urban area)	75
Accessible and unique recreational area (for example, vacant lots in urban area)	75
Moderately accessible (may have some access improvements-for example, gravel road) with some public recreation use	50
Slightly accessible (for example, extremely rural area with no road improvement) with some public recreation use	25
<u>Accessible with no public recreation use</u>	<u>10</u>
Surrounded by maintained fence or combination of maintained fence and natural barriers	5
Physically inaccessible to public, with no evidence of public recreation use	0

**SI TABLE 18 (HRS TABLE 5-7): AREA OF CONTAMINATION FACTOR
VALUES**

Total area of the areas of observed contamination (square feet)	Assigned Value
\leq to 5,000	5
> 5,000 to 125,000	20
> 125,000 to 250,000	40
> 250,000 to 375, 000	60
>375,000 to 500,000	80
<u>>500,000</u>	<u>100</u>

Note: 33 acres = 1,437,480 ft.²

S1 TABLE 19 (HRS TABLE 5-8): NEARBY POPULATION LIKELIHOOD OF EXPOSURE FACTOR VALUES

AREA OF CONTAMINATION FACTOR VALUE	ATTRACTIVENESS/ACCESSIBILITY FACTOR VALUE						
	100	75	50	25	10	5	0
100	500	500	375	250	125	50	0
80	500	375	250	125	50	25	0
60	375	250	125	50	25	5	0
40	250	125	50	25	5	5	0
20	125	50	25	5	5	5	0
5	50	25	5	5	5	5	0

SI TABLE 20 (HRS TABLE 5-10): DISTANCE WEIGHTED POPULATION VALUES FOR NEARBY POPULATION THREAT

Travel Distance Category (miles)	Pop.	Number of people within the travel distance category												Pop. Value
		0	1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	
Greater than 0 to 1/4	0	0	0.1	0.4	1.0	4	13	41	130	408	1,303	4,081	13,034	0
Greater than 1/4 to 1/2	2,658	0	0.05	0.2	0.7	2	7	20	65	204	652	2,041	6,517	20
Greater than 1/2 to 1	4,624	0	0.02	0.1	0.3	1	3	10	33	102	326	1,020	3,258	33
Reference(s): 29														SUM =
														53

SOIL EXPOSURE PATHWAY WORKSHEET (concluded)**WASTE CHARACTERISTICS**

10. Assign the hazardous waste quantity score calculated for soil exposure (HRS Section 5.1.2.2 and HRS Table 5-2).		100
11. Assign the highest toxicity value for the soil exposure pathway (SI Table 3 or 15).		10,000
12. Multiply the toxicity and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below:		WC= 32
Product	WC Score	
0	0	
>0 to < 10	1	
10 to <100	2	
100 to < 1,000	3	
1,000 to <10,000	6	
10,000 to < 1E + 05	10	
1E + 05 to < 1E + 06	18	
1E + 06 to < 1E + 07	32	
1E + 07 to < 1E + 08	56	
1E + 08 or greater	100	

RESIDENT POPULATION THREAT SCORE:

Likelihood of Exposure, Question 1;
(Targets = Sum of Questions 2,3,4,5,6)

$$\frac{LE \times T \times WC}{82,500}$$

2.13

NEARBY POPULATION THREAT SCORE:

Likelihood of Exposure, Question 7;
(Targets = Sum of Questions 8,9)

$$\frac{LE \times T \times WC}{82,500}$$

0.26

SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

(Maximum of 100)

2.39

AIR PATHWAY**Air Pathway observed Substances Summary Table**

On SI Table 21, list the hazardous substances detected in air samples of a release from the site. Include only those substances with concentrations significantly greater than background levels. Obtain benchmark, cancer risk, and reference dose concentrations from SCDM. For NAAQS/NESHAPS benchmarks, determine the highest percentage of benchmark obtained for any substance. For cancer risk and reference dose, sum the percentages for the substances listed. If benchmark, cancer risk or, reference dose concentrations are not available for a particular substance, enter N/A for the percentage. If the highest benchmark percentage or the percentage sum calculated from which the sample was taken and any closer distance categories as Level I. If the percentages are less than 100% or all are N/A, evaluate targets in that distance category and any closer distance categories that are not Level I as Level II.

***Not Evaluated ***

TABLE 21: AIR PATHWAY OBSERVED RELEASE SUBSTANCES

Sample ID:	Level I	Level II	Distance from Sources(ml)		References			
Hazardous Substance	Conc. ($\mu\text{g}/\text{m}^3$)	Gaseous Particulate	Benchmark Conc. (NAAQS or NESHAPS)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RID	% of RID
Highest Toxicity/Mobility			Highest Percent		Sum of Percents		Sum of Percents	

Sample ID:	Level I	Level II	Distance from Sources(ml)		References			
Hazardous Substance	Conc. ($\mu\text{g}/\text{m}^3$)	Gaseous Particulate	Benchmark Conc. (NAAQS or NESHAPS)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RID	% of RID
Highest Toxicity/Mobility			Highest Percent		Sum of Percents		Sum of Percents	

Sample ID:	Level I	Level II	Distance from Sources(ml)		References			
Hazardous Substance	Conc. ($\mu\text{g}/\text{m}^3$)	Gaseous Particulate	Benchmark Conc. (NAAQS or NESHAPS)	% of Benchmark	Cancer Risk Conc.	% of Cancer Risk Conc.	RID	% of RID
Highest Toxicity/Mobility			Highest Percent		Sum of Percents		Sum of Percents	

Not Evaluated**AIR PATHWAY WORKSHEET**

LIKELIHOOD OF RELEASE	SCORE	DATA TYPE	REFS
1. OBSERVED RELEASE: If sampling data or direct observation support a release to air, assign a score of 550. Record observed release substances on SI Table 21.			
2. POTENTIAL TO RELEASE: If sampling data do not support a release to air, assign as score of 500. Optionally, evaluate air migration gaseous and particulate potential to release (HRS Section 6.1.2).			
LR =			

TARGETS

3. ACTUAL CONTAMINATION POPULATION: Determine the number of people within the target distance limit subject to exposure from a release of a hazardous substance to the air. a) Level I: _____ people x 10 = _____ b) Level II: _____ people x 1 = _____ Total = _____			
4. POTENTIAL TARGET POPULATION: Determine the number people within the target distance limit not subject to exposure from a release of a hazardous substance to the air, and assign the total population score from SI Table 22. Sum the values and multiply the sum by 0.1.			
5. NEAREST INDIVIDUAL: Assign a score of 50 if there are any Level I targets. Assign a score of 45 if there are Level II targets but no Level I targets. If no Actual Contamination Population exists, assign the Nearest Individual score from SI Table 22.			
6. ACTUAL CONTAMINATION SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (SI Table 13) and wetland acreage values (SI Table 23) for environments subject to exposure from the release of a hazardous substance to the air.			
Sensitive Environment Type	Value		
Wetland Acreage	Value		
7. POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS: Use SI Table 24 to evaluate sensitive environments not subject to exposure from a release.			
8. RESOURCES: Assign a score of 5 if one or more air resources apply within 1/2 mile of a source; assign a 0 if none applies. • Commercial agriculture • Commercial silviculture • Major or designated recreation area			
SUM OF TARGETS T=			

SI TABLE 22 (FROM HRS TABLE 6-17): VALUES FOR POTENTIAL CONTAMINATION AIR TARGET POPULATIONS

Distance From Site	Pop.	Nearest Individual (choose highest)	Number of People within the Distance category												Pop. Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,000 to 3,000,000	
On a source		20	4	17	53	164	522	1,633	5,214	16,325	52,137	163,246	521,360	1,632,455	
0 to ¼ mile		*	1	4	13	41	131	408	1,304	4,081	13,034	40,812	130,340	408,114	
>¼ to ½ mile		2	0.2	0.9	3	9	28	88	282	822	2,815	8,815	28,153	88,153	
>½ to 1 mile		1	0.06	0.3	0.9	3	8	26	83	261	834	2,612	8,342	26,119	
>1 to 2 miles		0	0.02	0.09	0.3	0.8	3	8	27	83	266	833	2,659	8,326	
>2 to 3 miles		0	0.009	0.04	0.1	0.4	1	4	12	38	120	375	1,199	3,755	
>3 to 4 miles		0	0.005	0.02	0.07	0.2	0.7	2	7	28	73	229	730	2,285	
Nearest Individual =															Sum =

* Score = 20 if the Nearest Individual is within 1/8 mile of a source; score = 7 if the Nearest Individual is between 1/8 and 1/4 mile of a source.

References _____

**SI TABLE 23 (HRS TABLE 6-18): AIR PATHWAY
VALUES FOR WETLAND AREA**

Wetland Area	Assigned Value
<1 acre	0
1 to 50 acres	25
>50 to 100 acres	75
>100 to 150 acres	125
>150 to 200 acres	175
>200 to 300 acres	250
>300 to 400 acres	350
>400 to 500 acres	450
>500 acres	500

**SI TABLE 24: DISTANCE WEIGHTS AND CALCULATIONS FOR
AIR PATHWAY POTENTIAL CONTAMINATION SENSITIVE ENVIRONMENTS**

Distance	Distance Weight	Sensitive Environment Type and Value (from SI Table 13 and 23)	Product
On a source	0.10	x	
		x	
0 to ¼ mile	0.025	x	
		x	
¼ to ½ mile	0.0054	x	
		x	
½ to 1 mile	0.0016	x	
		x	
1 to 2 miles	0.0005	x	
		x	
2 to 3 miles	0.00023	x	
		x	
3 to 4 miles	0.00014	x	
		x	
>4 miles	0	x	
Total Environments Score =			

AIR PATHWAY (concluded)**WASTE CHARACTERISTICS**

9. If any Actual Contamination Targets exist for the air pathway assign the calculated hazardous waste quantity score or a score of 100, whichever is greater; if there are not Actual Contamination Targets for the air pathway, assign the calculated HWQ score for sources available to air migration.		
10. Assign the highest air toxicity/mobility value from SI Table 3 or 21		
11. Multiply the air pathway toxicity/mobility and hazardous waste quantity scores. Assign the Waste Characteristics score from the table below:		WC =
Product	WC Score	
0	0	
>0 to < 10	1	
10 to <100	2	
100 to <1,000	3	
1,000 to 10,000	6	
10,000 to 1E + 05	10	
1E + 05 to < 1E + 06	18	
1E + 06 to < 1E + 07	32	
1E + 07 to < 1E + 08	56	
1E + 08 or greater	100	

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(maximum of 100)

N / E*** Not Evaluated ***

SITE SCORE CALCULATION	S	S ²
GROUND WATER PATHWAY SCORE (S _{GW})	0	0
SURFACE WATER PATHWAY SCORE (S _{SW})	6.37	40.58
SOIL EXPOSURE (S _S)	2.39	5.71
AIR PATHWAY SCORE (S _A)	0	0
Summed Value =	46.29	
SITE SCORE $\sqrt{\frac{S_{GW}^2 + S_{SW}^2 + S_S^2 + S_A^2}{4}}$	3.40	

COMMENTS

$$\text{SITE SCORE} = \sqrt{\frac{0 + 40.58 + 5.71 + 0}{4}}$$

$$\text{SITE SCORE} = \sqrt{\frac{46.29}{4}}$$

$$\text{SITE SCORE} = \sqrt{11.57}$$

$$\text{SITE SCORE} = 3.40$$

CONFIDENTIAL

**HAZARD RANKING SYSTEM SCORE
FOR
ZEP MANUFACTURING COMPANY
ATLANTA, FULTON COUNTY, GEORGIA
EPA ID GAD003267192**

A Hazard Ranking Score has been prepared using the Hazard Ranking System (HRS) score sheets for the ZEP Manufacturing (ZEP) site, located in Atlanta, Fulton County, Georgia. Two of the four pathways were evaluated using data obtained from U.S. Environmental Protection Agency (EPA) site files and the Preliminary Assessment (PA) conducted by the Georgia Environmental Protection Division (GAEPD) in 1989. No current site files were available from the GAEPD. The following scores represent a worst-case scenario in areas where data gaps were present. The data gaps are discussed below.

Pathway Scores

Groundwater Pathway Score (S_{GW})	=	0
Surface Water Pathway Score (S_{SW})	=	6.37
Soil Exposure Pathway Score (S_{SE})	=	2.39
Air Pathway Score (S_{AIR})	=	0

OVERALL SITE SCORE = 3.40

Sources and Waste Characteristics

The site score for ZEP was based on a hazardous waste quantity (HWQ) value of 100 for all pathways. The only documented samples from the facility were two soil samples collected to evaluate a potential petroleum release from two underground storage tanks that were removed prior to 1982 (Ref. 2). Due to the lack of environmental samples, a data gap exists regarding the exact quantity and contaminants of hazardous materials on site. A worst-case waste quantity was based on an annual waste generation of 274 tons and 33 acres of on-site soils (Refs. 2, 4). Because hazardous waste is manifested off site, the generated waste source was determined from the facility's 1997 reported waste generation. These wastes included the following

compounds considered available to all pathways: mercury, benzene, cresol, hexane, methanol, toluene, trichloroethylene, tetrachloroethylene, xylene, and 1,1,1-trichloroethane (Refs. 5, 6, 7). On-site soils were assumed to contain the same constituents as the generated wastes.

Groundwater Migration Pathway

The groundwater (GW) migration pathway is not a pathway of concern due to the lack of a principal aquifer. The facility lies within the Atlanta City limits, and municipal water is available to Atlanta area residents. Water is obtained by a surface water intake on the Chattahoochee River near Peachtree Creek (Ref. 16). Due to the lack of groundwater receptors and the lack of any documentation indicating a release to groundwater, the groundwater migration pathway was not evaluated.

Surface Water Migration Pathway

The surface water (SW) migration pathway generated the highest pathway score of 3.19. The surface water pathway is a primary pathway of concern due to the potential to discharge contaminants into an unnamed tributary of Woodall Creek located approximately 500 feet west of the site (Ref. 2, p. 4). According to the PA, storm water flows to the west and enters Woodall Creek through a spillway. Woodall Creek flows to the north for approximately one mile to Peachtree Creek. Peachtree Creek flows in a meandering path approximately ½-mile west where it is joined by Nancy Creek. Peachtree Creek continues another ½-mile to the southwest where it enters the Chattahoochee River (Ref. 1). A water intake for the City of Atlanta municipal water system is located just south of the confluence of Peachtree Creek and the Chattahoochee River (Ref. 16). The City of Atlanta municipal water system serves a population of 650,000 (Ref. 24).

The base discharge flow of Peachtree Creek is 2,500 cubic feet per second (cfs) (Ref. 25). The base discharge flow of the Chattahoochee River at Atlanta is 13,000 cfs (Ref. 25). The flow of Woodall Creek has not been documented, but is estimated to have a flow rate between 10 and 100 cfs (Ref. 1).

Sensitive environments identified along the surface water pathway include approximately 0.4 miles of wetlands on Woodall Creek, and approximately 1 mile of wetlands on Peachtree Creek. There are also

approximately 5 miles of wetlands along the Chattahoochee River within the 15-mile target distance limit (TDL) (Ref. 26).

Five protected animal species are found in Fulton County, Georgia. These include the Bachman's Sparrow, Bluestripe Shiner, Shinyrayed Pocketbook, Gulf Moccasinshell, and Highscale Shiner (Ref. 27). There are six protected species of plants found in Fulton County. These include the Georgia Aster, Pink Ladyslipper, Large-flowered Yellow Ladyslipper, Harper Heartleaf, Bay Starvine, and Piedmont Barren Strawberry (Ref. 27). The species exact locations are unknown and the high dilution factors prohibit any appreciable target values.

Since no environmental samples have been collected, the SW pathway score was based on a worst-case Likelihood of Release value (LR) of 500. For the Drinking Water Threat component of the SW pathway, the Target value (T) was 10.2 due to a water intake on the Chattahoochee River that provides water for the City of Atlanta. The Waste Characteristics value (WC) was 32, resulting in a Drinking Water Threat component score of 2.0.

For the Human Food Chain component of the SW pathway, a Target value (T) of 2 was determined for potential contamination to fisheries on Woodall Creek. A Waste Characteristic (WC) value of 320 was determined due to the high toxicity/persistence/bioaccumulation value for mercury. These values resulted in a Human Food Chain component score of 6.37.

For the Environmental Threat component of the SW pathway, a Target value (T) of 0.254 was determined for potential contamination of over 5 miles of eligible wetland frontage along Woodall Creek, Peachtree Creek, and the Chattahoochee River. The Waste Characteristic (WC) value of 320 was due to the high ecotoxicity/persistence/bioaccumulation values of mercury. This value resulted in an Environmental Threat component of 0.49. Adding the three components of the SW pathway together results in the SW pathway score of 3.19.

Soil Exposure Pathway

The soil exposure (SE) pathway scored a 2.39. The score was also limited due to the low number of targets available to this pathway. The only area of documented soil contamination (for petroleum) was associated

with two USTs that were removed prior to 1982. As a worst case assumption, the entire 33-acre site was considered contaminated to generate a worst-case SE score.

The Resident Population component of the SE pathway used a Likelihood of Exposure (LE) value of 550 due to the assumption of contaminated soil. ZEP is an active facility with a worker population of up to 550 employees, resulting in a Target (T) value of 10 for the Resident Population component. The Waste Characteristics (WC) value of 32 was used assuming the same contaminants are in the contaminated soil. These values resulted in a resident population threat score of 2.13.

The Nearby Population component of the SE pathway used a Likelihood of Exposure (LE) value of 125 as the site is accessible, but there is no public recreation on the property. The nearby population resulted in a Target (T) value of 5.3, and the Waste Characteristics (WC) value remained at 32, resulting in a Nearby Population component of 0.26. The addition of the two components yielded a SE pathway score of 2.39.

Air Migration Pathway

The air pathway is not a concern at ZEP as air emissions from the facility are permitted through the GAEPD, Air Protection Branch that enforces the rules set forth by the Clean Air Act (Ref. 5). The PA and current records search has not identified any unregulated releases to air, and the facility has been inspected by the GAEPD, as recently as May 11, 1999 (Ref. 5). Since air emissions from the facility are regulated, the air pathway was not evaluated.

Conclusions

The ZEP facility is a 33-acre manufacturing site located in an industrial park. The GAEPD conducted a PA with visual site inspection in 1989. The PA identified four potential source areas that were not applicable when evaluated under current HRS guidelines. However, two potential sources were identified and evaluated to generate a worst-case scoring scenario. These sources included generated waste and site soils.

Two of the four pathways were evaluated for ZEP. Since the city of Atlanta provides residents and

businesses treated water through a municipal system with a surface water source, the groundwater pathway was not evaluated. Furthermore, since all air emissions are regulated and there is no documentation of unregulated air emissions, the air pathway was not evaluated. Only two soil samples have been collected from the facility to evaluate a petroleum tank removal in 1982. Because no environmental samples have been collected, pathway scores were generated using realistic worst-case assumptions of contamination. Due to the limited number of potential receptors and high flow rates of major waterways, no pathway generated an elevated score.

The 1990 Record of Decision (ROD) deferred the site to RCRA. A subsequent review of the file material and worst-case scoring of the site generated a low HRS score of 1.99. Based on the information gathered herein, and the resulting low HRS score, a decision of No Further Remedial Action Planned (NFRAP) is recommended.

GROUNDWATER MIGRATION PATHWAY SCORESHEET

Not Evaluated

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to an Aquifer</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
1. Observed Release	550	_____
2. Potential to Release		_____
2a. Containment	10	_____
2b. Net Precipitation	10	_____
2c. Depth to Aquifer	5	_____
2d. Travel Time	35	_____
2e. Potential to Release	500	_____
3. Likelihood of Release (Higher of lines 1 or 2e)	550	_____
<u>Waste Characteristics</u>		
4. Toxicity/Mobility	10,000	_____
5. Hazardous Waste Quantity	1,000,000	_____
6. Waste Characteristics	100	_____
<u>Targets</u>		
7. Nearest Well	50	_____
8. Population		_____
8a. Level I Contamination	No Maximum	_____
8b. Level II Concentrations	No Maximum	_____
8c. Potential Contamination	No Maximum	_____
8d. Population (Lines 8a+8b+8c)	No Maximum	_____
9. Resources	5	_____
10. Wellhead Protection Area	20	_____
11. Targets (Lines 7+8d+9+10)	No Maximum	_____
<u>Groundwater Migration Score for Crystalline Rock Aquifer</u>		
12. Aquifer Score (Lines 3 x 6 x 11 / 82,500) $340 \times 5.64 \times 10 / 82,500 = 0.23$	100	_____
<u>Groundwater Migration Pathway Score</u>		
13. Groundwater Migration Pathway Score (S_{GW}) (Highest value from Line 12 for all aquifers evaluated)	100	<u>Not Evaluated</u>

**SURFACE WATER OVERLAND/FLOOD MIGRATION PATHWAY SCORESHEET
DRINKING WATER THREAT COMPONENT (Part 1 of 3)**

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to Surface Water</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
1. Observed Release	550	_____
2. Potential to Release		
2a. Distance to surface water <2500 feet	500	_____ 500
Distance to surface water >2500 feet and:		
2b. Site in annual or 10-year floodplain	500	_____
2c. Site in 100-year floodplain	400	_____
2d. Site in 500-year floodplain	300	_____
2e. Site outside 500-year floodplain	100	_____
3. Likelihood of Release (LR) (Highest value of Lines 1, 2a, 2b, 2c, 2d, or 2e)	550	_____ 500

Waste Characteristics

4. Toxicity/Persistence	10,000	_____ 10,000
5. Hazardous Waste Quantity	1,000,000	_____ 100
6. Waste Characteristics (WC)	1,000	_____ 32

Targets

7. Nearest Intake	50	_____
8. Population		
8a. Level I Concentrations	No Maximum	_____
8b. Level II Concentrations	No Maximum	_____
8c. Potential Contamination	No Maximum	_____ 5.2
8d. Population (Lines 8a+8b+8c)	No Maximum	_____
9. Resources	5	_____ 5
10. Targets (T) (Lines 8d+9+10)	No Maximum	_____ 10.2

Surface Water Migration Score for Drinking Water Threat Component

11. Drinking Water Threat Score (Lines 3 x 6 x 10 / 82,500) 500 x 32 x 10.2 / 82,500 = 2.0	100	_____ 2
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**SURFACE WATER OVERLAND/FLOOD MIGRATION PATHWAY SCORESHEET
HUMAN FOOD CHAIN THREAT COMPONENT (Part 2 of 3)**

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to Surface Water</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
12. Likelihood of Release (LR) (Value from Line 3)	550	<u>500</u>

Waste Characteristics

13. Toxicity/Persistence/Bioaccumulation	1E+12	<u>5E+08</u>
14. Hazardous Waste Quantity	1,000,000	<u>100</u>
15. Waste Characteristics (WC)	1,000	<u>320</u>

Targets

16. Food Chain Individual	50	<u> </u>
17. Population		<u> </u>
17a. Level I Concentrations	No Maximum	<u> </u>
17b. Level II Concentrations	No Maximum	<u> </u>
17c. Potential Human Food Chain Contamination	No Maximum	<u>2</u>
17d. Population (Lines 17a+17b+17c)	No Maximum	<u>2</u>
18. Targets (T) (Lines 16 + 17d)	No Maximum	<u>2</u>

Surface Water Migration Score for Human Food Chain Threat Component

19. Human Food Chain Threat Score (Lines 12 x 15 x 18 / 82,500) 500 x 320 x 2 / 82,500 = 3.67	100	<u>3.87</u>
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**SURFACE WATER OVERLAND/FLOOD MIGRATION PATHWAY SCORESHEET
ENVIRONMENTAL THREAT COMPONENT (Part 3 of 3)**

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to Surface Water</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
20. Likelihood of Release (LR) (Value from Line 3)	550	<u>500</u>

Waste Characteristics

21. Ecotoxicity/Persistence/Ecobioaccumulation	5E+12	<u>5E+10</u>
22. Hazardous Waste Quantity	1,000,000	<u>100</u>
23. Waste Characteristics (WC)	1,000	<u>320</u>

Targets

24. Sensitive Environments		
24a. Level I Concentrations	No Maximum	<u></u>
24b. Level II Concentrations	No Maximum	<u></u>
24c. Potential Contamination	No Maximum	<u>0.254</u>
24d. Population Value of Sensitive Environments (Lines 24a+24b+24c)	No Maximum	<u>0.254</u>
25. Targets (T) (Value from Line 24d)	No Maximum	<u>0.254</u>

Surface Water Migration Score for Environmental Threat Component

26. Environmental Threat Score (Lines 20 x 23 x 25 / 82,500) $500 \times 320 \times 0.254 / 82,500 = 0.49$	60	<u>0.49</u>
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Surface Water Migration Score for Overland/Flood Migration Pathway

27. Surface Water Pathway Score (S_{sw}) (Drinking Water Score + Food Chain Score + Environmental Score) $2.0 + 3.87 + 0.49 = 6.37$	100	<u>6.37</u>
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**SOIL EXPOSURE PATHWAY SCORESHEET
RESIDENT POPULATION COMPONENT (Part 1 of 2)**

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Exposure</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
1. Likelihood of Exposure (LE)	550	<u>550</u>
<u>Waste Characteristics</u>		
2. Toxicity	10,000	<u>10,000</u>
3. Hazardous Waste Quantity	1,000,000	<u>100</u>
4. Waste Characteristics (WC)	1,000	<u>32</u>
<u>Targets</u>		
5. Resident Individual	50	<u> </u>
6. Resident Population		<u> </u>
6a. Level I Concentrations	No Maximum	<u> </u>
6b. Level II Concentrations	No Maximum	<u> </u>
6c. Resident Population (Lines 6a+6b)	No Maximum	<u> </u>
7. Workers	15	<u>10</u>
8. Terrestrial Sensitive Environments	No Maximum	<u> </u>
9. Resources	5	<u> </u>
10. Targets (T) (Lines 5 + 6c + 7 + 8 + 9)	No Maximum	<u>10</u>
<u>Soil Exposure Score for Resident Population Component</u>		
11. Resident Population Score (Lines 1 x 4 x 7 / 82,500) 550 x 32 x 10 / 82,500 = 2.13	100	<u>2.13</u>

**SOIL EXPOSURE PATHWAY SCORESHEET
NEARBY POPULATION COMPONENT (Part 2 of 2)**

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Exposure</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
12. Attractiveness/Accessibility	100	<u>10</u>
13. Area of Contamination	100	<u>100</u>
14. Likelihood of Exposure (LE) (From SI Table 19)	500	<u>125</u>

Waste Characteristics

15. Toxicity	10,000	<u>10,000</u>
16. Hazardous Waste Quantity	1,000,000	<u>100</u>
17. Waste Characteristics (WC)	1,000	<u>32</u>

Targets

18. Nearby Individual	1	<u></u>
19. Population within 1 mile	4,624	<u>5.3</u>
20. Targets (T) (Lines 18 + 19)	No Maximum	<u>5.3</u>

Soil Exposure Score for Nearby Population Component

21. Nearby Population Score (Lines 14 x 17 x 20 / 82,500) $125 \times 32 \times 5.3 / 82,500 = 0.26$	100	<u>0.26</u>
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Soil Exposure Pathway Score

22. Soil Exposure Pathway Score (S_{SE}) (Resident Population Score + Nearby Population Score) $2.13 + 0.26 = 2.39$	100	<u>2.39</u>
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AIR MIGRATION PATHWAY SCORESHEET

Not Evaluated

FACTOR CATEGORIES AND FACTORS

<u>Likelihood of Release to Air</u>	<u>Maximum Value</u>	<u>Assigned Value</u>
1. Observed Release	550	_____
2. Potential to Release		
2a. Gas Potential to Release	500	_____
2b. Particulate Potential to Release	500	_____
2c. Potential to Release (Higher value of Lines 2a and 2b)	500	_____
3. Likelihood of Release (LR) (Higher value of Lines 1, or 2)	550	_____
<u>Waste Characteristics</u>		
4. Toxicity/Mobility	10,000	_____
5. Hazardous Waste Quantity	1,000,000	_____
6. Waste Characteristics (WC)	100	_____
<u>Targets</u>		
7. Nearest Individual	50	_____
8. Population		
8a. Level I Concentrations	No Maximum	_____
8b. Level II Concentrations	No Maximum	_____
8c. Potential Contamination	No Maximum	_____
8d. Population (Lines 8a+8b+8c)	No Maximum	_____
9. Resources	5	_____
10. Sensitive Environments		
10a. Actual Contamination	No Maximum	_____
10b. Potential Contamination	No Maximum	_____
10c. Sensitive Environments Value (Line 10a + 10b)	No Maximum	_____
11. Targets (T) (Lines 7 + 8d + 9 + 10c)	No Maximum	_____
<u>Air Migration Pathway Score</u>		
12. Air Migration Pathway Score (Lines 3 x 6 x 11 / 82,500)	100	<u>Not Evaluated</u>

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10730185 Site ID: GAD003267152

Site Name: Dep M&H Co.

Nature of Material:

Map: ☒

Computer Disks: ☐

Photos: ☐

CD-ROM: ☐

Blueprints: ☐

Oversized Report: ☐

Slides: ☐

Log Book: ☐

Other (describe): Reel Map

Amount of material: _____

* Please contact the appropriate Records Center to view the material *

ENVIRONMENTAL PRIORITIES INITIATIVE
PRELIMINARY ASSESSMENT/RCRA FACILITY ASSESSMENT OF

ZEP MANUFACTURING COMPANY

ATLANTA, GEORGIA

EPA ID # GAD003267192

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

NFRAP
8/15/90

December 14, 1989

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Table 4-1 Solid Waste Management Units

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Figure 1 - Site Location Map

Figure 2 - Process and Solid Waste Management Unit Locations

Figure 3 - Tank Layout

1.0 INTRODUCTION

The Georgia Environmental Protection Division (EPD) conducted a Preliminary Assessment (PA) and a Visual Site Inspection (VSI) at ZEP Manufacturing Company site on December 14, 1989.

1.1 Objective

The major objective of the RCRA Facility Assessment (RFA) program is to conduct an on-site and off-site inspection of the assigned facility in order to characterize the Solid Waste Management Units (SWMUs) associated releases and other Areas of Concern (AOC). The inspection is conducted in a two-phase operation: the Preliminary Review (PR) which includes the review and evaluation of specific file documents; and the Visual Site Inspection (VSI) which identified all SWMUs, known releases, and AOCs.

1.2 SCOPE OF WORK

The scope of this investigation included the following activities:

- A file search to review documents relevant to releases at the facility. Files reviewed for this PA include: RCRA, CERCLA, AIR and NPDES.
- Development of a detailed site map to scale including site features solid waste management unit locations and AOCs.
- Evaluation of target populations within a 3-mile radius from the site with regard to groundwater, air and surface water.
- Location of all private wells within a 3-mile radius of the site
- Detailed descriptions of all Solid Waste Management Units (SWMUs) and related releases and exposure pathways.
- Inspection of all SWMUs and Areas of Concern (AOC)

2.0 SITE DESCRIPTION

2.1 SITE LOCATION

The ZEP Manufacturing Company is located at 1310 Seaboard Industrial Boulevard in Atlanta, Fulton County, Georgia. The facility is more specifically located at 33°48'33" N Latitude and 84°25'43"W longitude on the United States Geological Survey Northwest Atlanta, Georgia Quadrangle 7.5 minute series, 1954 (Photorevised 1983) (Reference 1).

2.2 SITE FEATURES

The facility is in the northwest section of Atlanta, Georgia, within the city limits, and is situated approximately 1/2 mile east of the intersection of Chattahoochee Avenue and Marietta Boulevard (Georgia Highway 3). The site is within a industrial area bounded by Hills Avenue to the north, CSX railroad tracks to the east, Southern Railway tracks to the south and Marietta Boulevard to the west. The industrial area is surrounded by densely populated residential areas in all directions (See Appendix 1, Figure 1). The property is zoned industrial and occupies approximately 33 acres.

The facility consists of: two story office/production building, two tank farms, a warehouse and an acids blending building located on the north side of Seaboard Industrial Boulevard, and an aerosol plant, powders blending plant, hand lotion blending area, wastewater treatment plant, a warehouse and raw material and product storage areas situated on the south side. (See Appendix 1, Figure 2).

The site terrain generally slopes toward Seaboard Industrial Boulevard from all plant areas. Seaboard Industrial Boulevard slopes downward from east to west, passing over an unnamed tributary to Woodall Creek approximately 500 feet west of the ZEP facility.

2.3 OWNERSHIP HISTORY

The facility was constructed and began operation in 1956 under the ownership of National Service Industries, Incorporated of Atlanta, Georgia. It has been operated by ZEP Manufacturing Company, a subsidiary of National Service Industries, since 1970.

2.4 NATURE OF OPERATIONS.

The facility formulates a wide variety of institutional cleaning compounds, disinfectants, deodorants, dishwashing detergents, hand lotions, floor wax and pesticides.

Manufacturing operations consist of blending purchased solid and liquid bulk chemicals in tanks or vats, and repackaging the blended mixtures into drums or smaller containers.

Bulk liquids are stored in tanks within the vicinity they are to be used. There are approximately 200 storage tanks (see Appendix 1, Figure 3). Liquids used in smaller quantities are stored in drums in the warehouses and transported to the appropriate blending areas as needed. Hundreds of different organic liquids are blended in mixing vessels to produce over 1000

products. Products are piped from mixers to filling stations where they are then transferred by forklifts to warehouse storage in the product distribution area. Organic vapors from bulk liquid storage tanks, mixing vessels and drum filling are emitted, uncontrolled through building roof vents.

Acids used to produce a variety of cleaning mixtures are stored in tanks and mixed in the Acid House (see Appendix 1, Figure 2). Mixing tanks and filling stations in this area are vented to a wet scrubber to control acid mist emissions.

In the powder blending process area, powdered solids are mixed in ribbon blenders with wetting agents, perfumes and other liquids, then placed in product drums at filling stations. Solids are stored in silos and conveyed pneumatically. Dust emissions from silos are controlled by fabric filters. Dust and mist from blenders are controlled by a wet scrubber.

In the aerosol process building, raw liquid products are blended in a mixing tank, then charged into cans at a filling station along with carbon dioxide and propane propellants. Mist and vapor emissions from this area are uncontrolled.

2.5 PERMIT AND REGULATORY HISTORY

✓ The ZEP Manufacturing Company facility is currently classified as a generator of hazardous waste and is regulated by the Georgia Department of Natural Resources, Environmental Protection Division. Hazardous waste generators in the state of Georgia are regulated under the Rules for Hazardous Waste Management (O.C.G.A. 391-3-11).

✓ The facility is also regulated by Georgia EPD under the Rules for Air Quality Control (O.C.G.A. 391-3-1). Air Quality Permit No. 2842-060-5855-0, for operation of the acid plant fume scrubber was issued October 27, 1977. A revised air permit for the entire facility was submitted to Georgia EPD on October 31, 1988. (Reference 2). This application is still under review.

✓ Wastewater from the facility is discharged through a pretreatment plant into the City of Atlanta sanitary sewer system. There are no direct surface water discharges from the facility, and thus no State NPDES permits.

✓ The facility filed a RCRA Part A permit application November 18, 1980, for treatment (neutralization) of waste acids in a tank (Reference 3). Later this activity was determined to be exempt from RCRA Permit requirements and the company requested the Part A application be withdrawn on March 16, 1983 (Reference 4).

✓ Prior to 1982, two underground storage tanks (one for oil and one for acid) were removed. Some material was believed to have leaked prior to the removal. Samples of soil taken by EPD on April 29, 1982 indicated ppb levels of a number of petroleum products in the vicinity where the tanks had been (Reference 5). The area, near the wastewater treatment plant, was backfilled with clean soil and is now paved over.

On May 10, 1984, the facility was inspected by Ms. Renee Hudson (Reference 6). The facility was found to be in violation for inadequacies in the Emergency Preparedness and Contingency Plan, and a Notice of Violation was sent on June 25, 1984 (Reference 7). After reviewing the corrective actions taken by the facility, EPD notified ZEP that it had re-gained compliance on October 5, 1984 (Reference 8).

On January 14, 1986, a wastewater pipe carrying rinsewater from a blending tank in the hand lotion plant to the wastewater pretreatment plant plugged, causing this wastewater stream to back up into a manhole which overflowed down the curb of Seaboard Industrial Boulevard and into a tributary of Woodall Creek (Reference 9). As a result of this incident, the company agreed to Consent Order No. EPD-WQ-1055, executed on February 21, 1986, which included a \$2000 penalty and required corrective actions to prevent recurrence.

On November 13, 1987, the facility was inspected by Mr. Will Salter (Reference 10). Violations of the Emergency Preparedness and Contingency Plans were observed and a Notice of Violation was sent on January 5, 1988 (Reference 11). After reviewing the company's response, a letter indicating the facility had regained compliance was sent on March 24, 1988 (Reference 12).

On November 19, 1987, a 55 gallon drum of portable toilet disinfectant was ruptured by a forklift at a loading dock. The material flowed across the paved lot, through a storm drain and down the curb of Seaboard Industrial Boulevard toward a tributary of Woodall Creek. The flow was dammed up with absorbent and contained prior to entering the stream. The material was collected, along with absorbent, and placed in drums for disposal. No further action was required (Reference 13,14).

On July 13, 1988, the facility was inspected by Mr. Will Salter in response to a complaint by a neighboring business. No violations were found and no corrective actions were necessary (Reference 15).

3.0 ENVIRONMENTAL SETTING

3.1 WATER SUPPLY

All potable water within the study area is supplied by the City of Atlanta Water System, which serves an estimated population of 60,000 within the 3-mile radius. There are no known private wells within 3 miles of the facility.

3.2 SURFACE WATER

The nearest surface stream is an unnamed tributary (headwaters) of Woodall Creek located 500 feet west of the facility. Stormwater runoff from both the north and south sides of Seaboard Industrial Boulevard drains westward from the railroad tracks east of the facility to the point where Seaboard Industrial Boulevard crosses Woodall Creek. At this point, runoff

enters Woodall Creek through a spillway. Woodall Creek flows northward for approximately 1 1/4 miles before discharging into Peachtree Creek. Peachtree Creek flows northwesterly from this point for about 1/2 mile before merging with Nancy Creek, then flows southeasterly for about 3/4 mile until discharging into the Chattahoochee River. The City of Atlanta water system intake is located immediately downstream of the confluence of Peachtree Creek and the Chattahoochee River. Water is pumped from this point to two large reservoirs located upgradient (elevation 972) and about 1 1/2 miles southeast of the facility. A one-acre lake is located approximately 1/2 mile west of the facility, however, runoff from the facility would be intercepted by Woodall Creek. See Reference 1.

3.3 HYDROGEOLOGY

3.3.1 Geology

Fulton County lies wholly within the Atlanta Plateau which is part of the Piedmont Province. The Atlanta plateau has a rolling surface characterized by moderate slopes but has no great relief. The rolling land has low ridges and rounded knobs with deposits of colluvial-alluvial materials in depressions and along driveways. Much of Fulton County drainage is into the Gulf of Mexico by way of the Chattahoochee and Little Rivers, and also tributaries of the Flint River (Reference 16).

The elevation of the facility is approximately 875 feet above mean sea level (Reference 1).

3.3.2 Soils

The soils in the area of this facility are found in the Madison series and consist of fine sandy loam, eroded undulating phase with 2 to 6 percent slopes. It is characterized by its brown friable surface soil and red friable clay loam subsoil. The surface soil ranges from 2 to 7 inches in thickness. The fertility of the soil is low, runoff is slow to medium, internal drainage is medium, permeability is moderately rapid to moderate in the surface soil and moderate in the subsoil, and the moisture-holding capacity is moderate. The soil is used principally for cultivated crops and pasture (Reference 16).

3.3.3 Groundwater

The Piedmont Region utilizes an unconfined surficial aquifer. It is characterized by rock zone overlying crystalline rock. The groundwater sources can be found within and also interfacing both the weathered rock and the crystalline. Crystalline rock groundwater is most common within stress relief fractures, fault zones, zones of fracture concentration, small scale geologic structures that localize drainage, folds that produce concentrated jointing and shear zones. Two water wells in the general area of the facility have been documented. At the Aluminum Finishing Company, about 1/4 mile south of the facility, depth to groundwater is 25 feet. At the AZS Corporation, about 2 1/2 miles south of the facility, depth to groundwater is 21 feet (Reference 17).

3.4 Climate and Meteorology

The climate in the area is humid and continental. The winters are mild, but they have very changeable temperatures. The average winter temperature is 45.5°F while the average temperature in summer is 78.6°F (Reference 16). The annual rainfall is approximately 48 inches (Reference 18). The average mean lake evaporation is 41 inches (Reference 19). The 1-year, 24-hour rainfall is 3.5 inches (Reference 18).

3.5 Land Use

Land use within a one mile of the facility is mixed industrial and residential. The area bounded by the CSX Railroad tracks to the east and Marietta Boulevard to the west and is primarily industrial. Mount Vernon School is located about 2/3 miles southwest of the facility. The 1-2 mile radius is also mixed industrial/residential, and includes 4 schools and a public park. Residential areas include very dense multi-family unit to the southwest and primarily single family housing to the west and east. The 2-3 mile radius is residential/commercial and includes 11 schools in addition to the Georgia Institute of Technology. Also in this ring are the Chattahoochee River National Recreational Area to the northwest and Piedmont Hospital to the east (Reference 1).

3.6 Population Distribution

The population within the three mile radius of the ZEP Manufacturing Company facility is estimated to be: 0-1 mile, 5,000 people; 1-2 miles, 25,000 people; and 2-3 miles, 60,000+ people (Reference 1).

3.7 Critical Habitats/Endangered Species

The species listed on the Federal Endangered Species list which could be found in this area include the Indiana Bat (Myotis sodalis), the Red Cockaded Woodpecker (Picoides borealis), and the Southern Bald Eagle Haliaetus leucocephalus (Linnaeus) (Reference 20).

NARRATIVE SUMMARY

ZEP MANUFACTURING COMPANY ATLANTA, GEORGIA

The ZEP Manufacturing Company is located at 1310 Seaboard Industrial Boulevard in Atlanta, Fulton County, Georgia. The facility is within an industrial area of northwest Atlanta, surrounded by densely populated residential areas in all directions. The property is zoned industrial and occupies approximately 33 acres.

The facility produces a wide variety of institutional cleaning compounds, disinfectants, deodorants, dishwashing detergents, hand lotions, floor waxes and pesticides. Manufacturing operations consist of blending purchased solid and liquids bulk chemicals in tanks or vats, and repackaging the blended mixtures into drums or smaller containers. Bulk liquids are stored in tanks within the vicinity where they are to be used. Liquids used in smaller quantities are stored in drums in several warehouses and transported to the appropriate blending area as needed.

Solid waste management units (SWMUs) at the facility include three sludge drying beds at the wastewater treatment plant, a hazardous waste drum storage area, a neutralization tank in the Acid House area, and six silo dust collectors on the roof of the Powder Plant. No releases from these SWMUs have been documented.

The primary route of potential contamination is surface water. Since the current drum storage area is not curbed, runoff or spills could flow down Seaboard Industrial Boulevard and enter Woodall Creek, impacting the City of Atlanta water intake. The City of Atlanta provides drinking water for all residences and businesses within a 3-mile radius of the ZEP facility.

4.0 VISUAL SITE INSPECTION (VSI)

The Visual Site Inspection (VSI) of the ZEP Manufacturing Company facility was conducted on December 14, 1989. The intent of the VSI was to identify all Solid Waste Management Units (SWMUs) and assess their potential to release hazardous wastes or hazardous constituents into the environment.

Prior to the site tour, the Georgia EPD representative met with Mr. Steve Avary, Manager of Maintenance, to explain the purpose of the visit. Mr. Avary provided an overview of plant operations and waste handling practices. Since most of the products are simple mixtures of the raw materials, any off-specification products can usually be re-worked, so there is little waste. Production activities are conducted indoors in areas with secondary containment. Any spilled material is washed into the floor drain and carried by pipes (which also have secondary containment) to the wastewater pretreatment plant. The facility currently generates about 50 drums per year of hazardous waste (mostly solvents) which are stored on a concrete pad prior to shipment off-site for disposal. According to Mr. Avary, a new concrete pad, with secondary containment, is under construction and will be used to store drummed wastes in the future. There are no underground tanks at this facility.

The Georgia EPD representative was escorted on the plant tour by Mr. Avary. Since all process and warehouse areas were located indoors, with any wastes being carried through double lined pipes to the wastewater treatment plant, these process and warehouse areas were not deemed to be SWMUs.

4.1 SOLID WASTE MANAGEMENT UNITS

Four SWMUs were identified at the ZEP Manufacturing Company facility during the visual site inspection. They were the sludge drying beds at the wastewater treatment plant, the hazardous waste drum storage area, the neutralization tank in the Acid House area, and the silo dust collectors (6 total) on the roof of the Powder Plant.

These SWMUs are further identified in Table 4-1 and their location shown in Figure 2 of Appendix 1. Photographs taken of each SWMU appear in Appendix 2. Further description of each SWMU is presented in this section.

TABLE 4-1
SOLID WASTE MANAGEMENT UNITS

ZEP MANUFACTURING COMPANY
ATLANTA, FULTON COUNTY, GEORGIA

<u>SWMU NO.</u>	<u>NAME</u>	<u>RCRA REGULATED</u>	<u>STATUS</u>
1	Sludge Drying Bed	No	Active
2	Waste Drum Storage	Yes	Active
3	Neutralization Tank	Yes	Active
4	Silo Dust Collectors	No	Active

SWMU Number: 1

SWMU Name: Sludge Drying Beds

SWMU Description: Aerobically digested sludge is drained by gravity flow from the digester tank into one of these sand beds. Sludge is placed evenly over a layer of sand, contained within a concrete-curbed area. The sand layer is approximately 8 inches deep underlain by about 4 inches of gravel. Under the gravel layer is compacted clay, to prevent percolation of the filtrate into the soil below. Filtrate from the sludge passes through the sand into the gravel layer, where it is drained into a tank which is pumped into the equalization tank at the head of the waste treatment process.

DATE OF START UP: 1970

DATE OF CLOSURE: Still active.

WASTES MANAGED: Wastewater treatment sludge (non hazardous)

RELEASE CONTROLS: Concrete sidewalls, compacted clay bottom liner.

RELEASE HISTORY: No record of releases.

PHOTOGRAPH NO: 1.

SWMU Number: 2

SWMU Name: Waste Drum Storage

SWMU Description: This area is an uncurbed concrete pad partially covered by a fiberglass roof. Empty drums containing chemical residues are stored in this area on pallets prior to being transported to a drum reconditioning plant. Drums containing hazardous wastes are also stored on pallets in this area prior to shipment to a TSD. At the time of inspection all drums were empty. About 50 drums of hazardous waste are generated annually.

DATE OF START UP: 1980

DATE OF CLOSURE: This area will be closed in 1990. A new concrete lined and curbed waste drum storage area is under construction.

WASTES MANAGED: Empty drums with solvent residues. Drums of contaminated product and solvents, F001 and D001.

RELEASE CONTROLS: Drums are placed on pallets for leak/drip inspection. Pad is concrete lined but not curbed.

RELEASE HISTORY: No record or indication of releases.

PHOTOGRAPH NO: 2

SWMU Number: 3

SWMU Name: Neutralization Tank

SWMU Description: Any concentrated or diluted acids spilled on the floor of the Acid House in addition to air scrubber blowdowns, are gravity drained through PVC pipe into a 1500 gallon polypropylene tank. Contents of the tank are neutralized by caustic soda to pH 7 prior to being pumped to the wastewater treatment plant.

DATE OF START UP: January 1989. This tank replaced a vertical fiberglass tank (1200 gallon) installed in 1971 at the same location.

DATE OF CLOSURE: Still in operation.

WASTES MANAGED: Spilled acids/scrubber blowdown.

RELEASE CONTROLS: Secondary containment (concrete vault) inspected daily for leaks. pH probe to verify neutralization of tank contents.

RELEASE HISTORY: No record or indication of releases.

PHOTOGRAPH NO: 3

SWMU Number: 4

SWMU Name: Silo Dust Collectors

SWMU Description: Six vertical storage silos each equipped with a fabric filter dust collector to control airborne dust emissions. Collected dust is recycled back into each silo. Silos are located on the roof of the Powder Building, and dust collectors are on top of the silos.

DATE OF START UP: 1971.

DATE OF CLOSURE: Still in operation.

WASTES MANAGED: Non-hazardous powdered solids (talc, sodium carbonate, sodium phosphate) used to manufacture cleaning compounds.

RELEASE CONTROLS: Dust collector hoppers discharge directly into silos. Powder Plant roof is inspected visually for dust.

RELEASE HISTORY: No record or indication of releases.

PHOTOGRAPH NO: 4

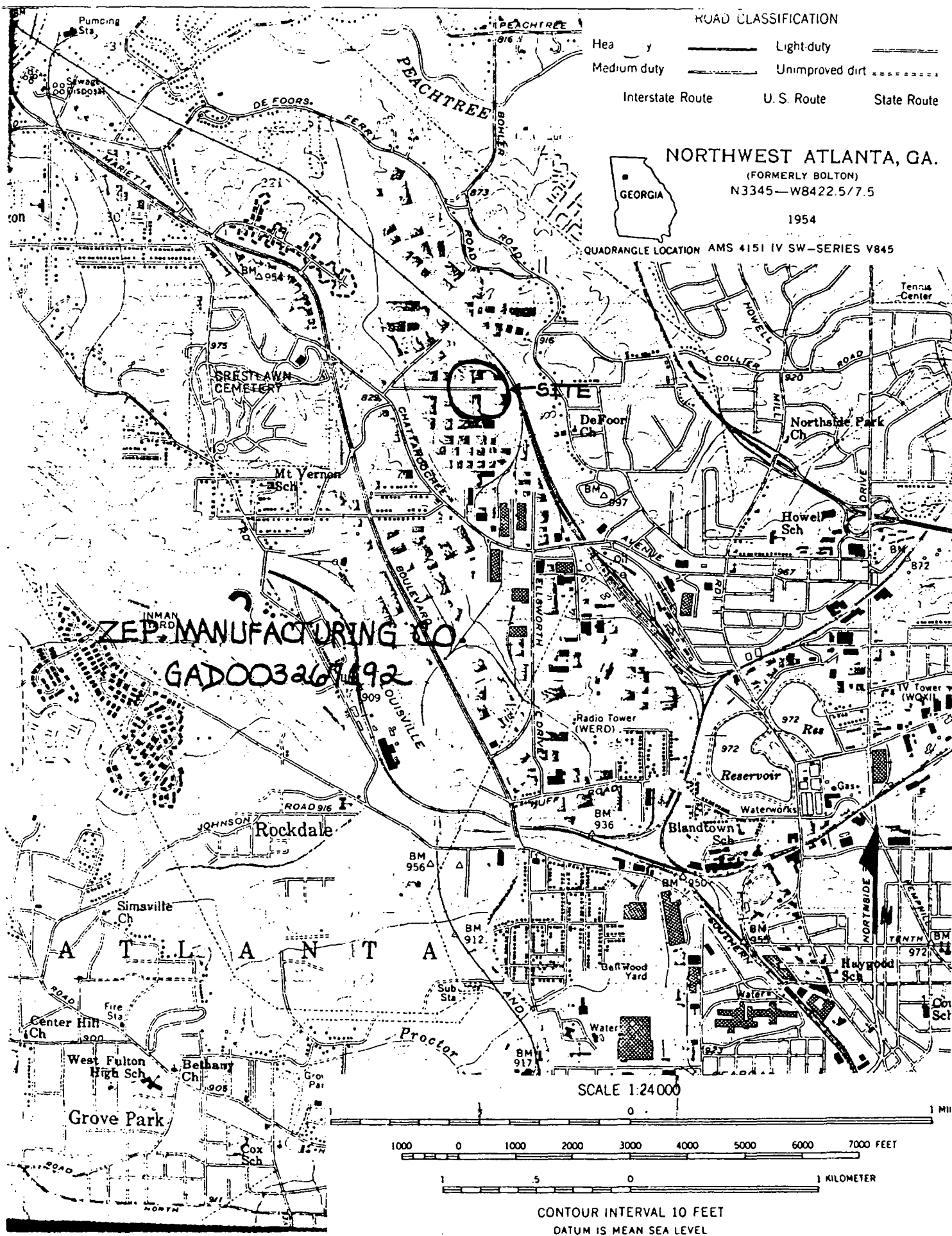
REFERENCES FOR EPI

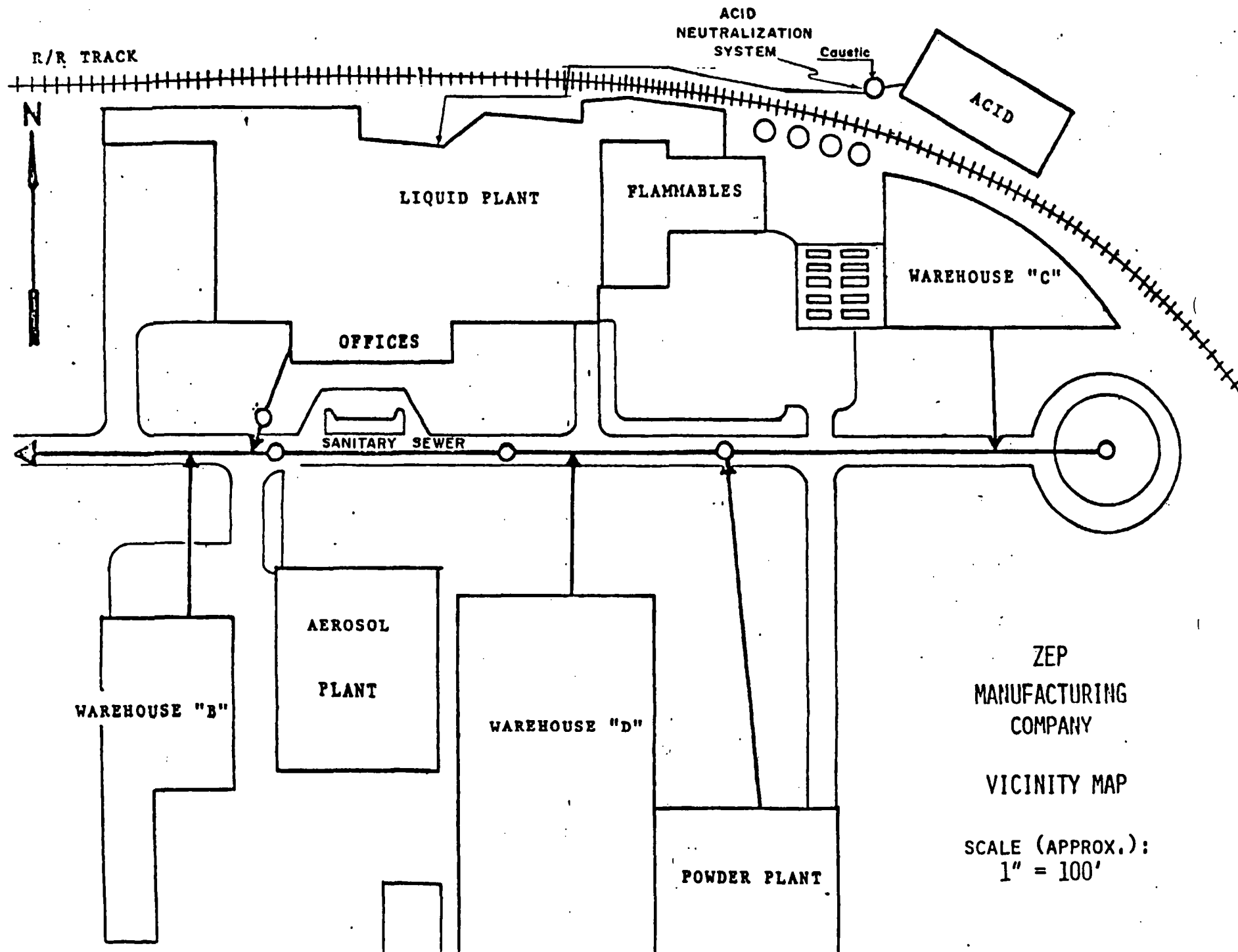
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4. Nagy, Richard W. Letter to Ms. Judy Tamplin dated March 16, 1983. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
5. Lansford, Harold. Laboratory report dated August 25, 1982. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
6. Hudson, I. Renee. Trip Report dated June 22, 1984. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
7. Barefoot, Howard L. Notice of Violation letter to Mr. Forrest Neese, dated June 25, 1984. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
8. Hudson, I. Renee. Letter to Mr. Forrest Neese dated October 5, 1984. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
9. Hopkins, Thomas E., Jr., Investigative Spill Report No. 432 dated January 14, 1986. Department of Natural Resources, Environmental Protection Division, Emergency Response Team files.
10. Salter, William. Trip Report, dated December 31, 1987, Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
11. Barefoot, Howard L. Notice of Violation, letter to Mr. Richard W. Nagy, dated January 5, 1988. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
12. Barefoot, Howard L. Letter to Mr. Richard W. Nagy, dated March 24, 1988. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.

13. Cash, Tim. Investigative Spill Report No. 484 dated November 19, 1987. Department of Natural Resources, Environmental Protection Division, Emergency Response Team files.
14. Mundy, Bill. Letter to Mr. Richard Nagy, dated January 6, 1988. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
15. Salter, Will. Trip Report dated July 27, 1988. Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
16. Walker, J.H. and others. Soil Survey - Fulton County, Georgia. U.S. Department of Agriculture, Soil Conservation Service, in Cooperation with the University of Georgia, College of Agriculture. Washington, D. C., U.S. Government Printing Office, 1949, pp. 1-4 and Sheets 41, 42, 46 and 47.
17. Cressler, C. W., C. J. Thurmond, and W. G. Hester. Groundwater in the Greater Atlanta Region, Georgia. Georgia Department of Natural Resources, Environmental Protection Division, Geologic Survey, Information Circular 63, 1983, pp. 62-63, and pp. 120-121.
18. Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1963, Figure 8.
19. Climatic Atlas of the United States. U. S. Department of Commerce, National Climatic Center, Asheville, North Carolina, 1979, Figures 4 and 5.
20. Odom, Ron R., Jerry L. McCollum, Mary Ann Neveille and David R. Ettman, Georgia's Protected Wildlife. Georgia Department of Natural Resources, Game and Fish Division, 1977.

APPENDIX 1

Figures





ZEP
MANUFACTURING
COMPANY

VICINITY MAP

SCALE (APPROX.):
1" = 100'

APPENDIX 2

Photographs

UNSCANNABLE

MEDIA

(PHOTOGRAPHS)

APPENDIX 3

Preliminary Assessment & Hazard Ranking System



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) ZEP Manufacturing Company		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 1310 Seaboard Industrial Blvd			
03 CITY Atlanta	04 STATE GA	05 ZIP CODE 30318	06 COUNTY Fulton	07 COUNTY CODE	08 CONG DIST
09 COORDINATES LATITUDE 33 48 33.0 N		LONGITUDE 084 25 43.0 W			
10 DIRECTIONS TO SITE (Starting from nearest public road) The facility is located at the east end of Seaboard Industrial Boulevard approximately 0.35 miles east of the intersection of Hills Avenue and Seaboard Industrial Boulevard					

III. RESPONSIBLE PARTIES

01 OWNER (if known) National Service Industries, Inc.		02 STREET (Business, mailing, residential) 1180 Peachtree Street, NE			
03 CITY Atlanta	04 STATE GA	05 ZIP CODE 30357	06 TELEPHONE NUMBER (404) 892-2400		
07 OPERATOR (if known and different from owner) ZEP Manufacturing Company		08 STREET (Business, mailing, residential) 1310 Seaboard Industrial Blvd.			
09 CITY Atlanta	10 STATE GA	11 ZIP CODE 30318	12 TELEPHONE NUMBER (404) 352-1680		
13 TYPE OF OWNERSHIP (Check one): <input checked="" type="checkbox"/> A PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input checked="" type="checkbox"/> A RCRA 3001 DATE RECEIVED: 11/17/80 MONTH DAY YEAR <input type="checkbox"/> B UNCONTROLLED WASTE SITE (RCRA 103(c)) DATE RECEIVED: ____/____/____ MONTH DAY YEAR <input type="checkbox"/> C NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 12/14/89 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply): <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one): <input checked="" type="checkbox"/> A ACTIVE <input type="checkbox"/> B INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1956 present BEGINNING YEAR ENDING YEAR <input type="checkbox"/> UNKNOWN			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED					
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION					

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents): <input type="checkbox"/> A HIGH (inspection required promptly) <input type="checkbox"/> B MEDIUM (inspection required) <input type="checkbox"/> C LOW (inspection on time available basis) <input checked="" type="checkbox"/> D NONE (no further action needed, complete current disposal forms)			
--	--	--	--

VI. INFORMATION AVAILABLE FROM

01 CONTACT Steve Avary, Jr.		02 OF (Agency, Organization) ZEP Manufacturing Co.		03 TELEPHONE NUMBER (404) 352-1680	
04 PERSON RESPONSIBLE FOR ASSESSMENT Jack Taylor		05 AGENCY GA EPD	06 ORGANIZATION Haz. Waste	07 TELEPHONE NUMBER (404) 656-2833	08 DATE 12/14/89 MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE GA 02 SITE NUMBER D003267192

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) <input type="checkbox"/> A SOLID <input checked="" type="checkbox"/> B POWDER FINES <input checked="" type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ (Specify)	02 WASTE QUANTITY AT SITE (Measure in mobile quantities must be independent) TONS _____ CUBIC YARDS _____ NO OF DRUMS <u>less than 1</u>	03 WASTE CHARACTERISTICS (Check all that apply) <input checked="" type="checkbox"/> A TOXIC <input checked="" type="checkbox"/> B CORROSIVE <input checked="" type="checkbox"/> C RADIOACTIVE <input type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input checked="" type="checkbox"/> F INFECTIOUS <input checked="" type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
--	---	---

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown		non hazardous WTP sludge
OLW	OILY WASTE			
SOL	SOLVENTS	14.65	Tons	recycled per 1987 biennial rept.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	1.80	Tons	drum residue to reconditioner per 1987 biennial rept.
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
ACD	Hydrochloric Acid	007647010	wastewater treatment		
ACD	Sulfuric Acid	007664382	wastewater treatment		
ACD	Phosphoric Acid	007664382	wastewater treatment		
BAS	sodium hydroxide	001310732	wastewater treatment		
SOL	1,1,1trichloroethane	000071556	recycle		
OCC	Formaldehyde	000050000	recycle		
OCC	Paradichlorobenzene	000106467	recycle		
OCC	Ethylene glycol	000103211	recycle		
SOL	Toluene	000108883	recycle		
SOL	Xylene	001330207	recycle		
SOL	Perchloroethylene	000127184	recycle		
OCC	Diethanolamine	000111422	recycle		
SOL	Methylene chloride	000075092	recycle		
OCC	Cresylic acid	001319773	recycle		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (See specific references in 2. State files, sample analysis, reports.)

Georgia EPD Files



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER
GA | D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

possible spills from drum/tank storage
possible infiltration through clay liner under WWP sludge drying beds

01 ☒ B SURFACE WATER CONTAMINATION 02 ☒ OBSERVED (DATE 1/14/86) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED unknown 04 NARRATIVE DESCRIPTION

approx. 3000 gallons of untreated wastewater entered unnamed tributary to Woodall Creek through storm sewer, as a result of blockage in the line to the wastewater treatment plant.

01 ☐ C CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ D FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ E DIRECT CONTACT 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☒ F CONTAMINATION OF SOIL 02 ☒ OBSERVED (DATE 4/29/82) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED 0.001 04 NARRATIVE DESCRIPTION

contaminated soil from past leakage of underground tanks was left in place and covered with clean soil and paved over.

01 ☐ G DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ H WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A

01 ☐ I POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

N/A



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include number(s) of species)

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES
(Spills, runoff, standing liquids, leaking drums)

02 ☒ OBSERVED (DATE 11/19/87)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED _____

04 NARRATIVE DESCRIPTION

one drum of portable toilet disinfectant was punctured by a forklift in distribution area, releasing liquid into paved parking plot. Liquid was contained and collected with absorbent into drums.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

N/A

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☒ OBSERVED (DATE 1/14/86)

☐ POTENTIAL

☐ ALLEGED

approx 3000 gallons of untreated wastewater entered unnamed tributary to Woodall Creek through stormsewer as a result of blockage in the line to the wastewater treatment plant.

01 ☐ P. ILLEGAL UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE _____)

☐ POTENTIAL

☐ ALLEGED

N/A

05 DESCRIPTION OF ANY OTHER KNOWN POTENTIAL OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (List specific references to data sources, sample analysis, inquiries)

Georgia EPD Files

APPENDIX 3

RECONNAISSANCE CHECKLIST FOR HRS2 CONCERNS

Instructions: Obtain as much "up front" information as possible prior to conducting fieldwork. Complete the form in as much detail as you can, providing attachments as necessary. Cite the source for all information obtained.

Site name: ZEP Manufacturing Company

City, County, State: Atlanta, Fulton County

EPA ID No.: GAD003267192

Person responsible for form: Jack Taylor

Date: December 14, 1989

Air Pathway

Describe any potential air emission sources onsite: organic vapor from tank storage (uncontrolled); organic vapor from process blending (fugitive); organic vapor from air-stripping of wastewater (uncontrolled); acid vapor from process blending (controlled by scrubber).

Identify any sensitive environments within 4 miles: N/A

Identify the maximally exposed individual (nearest residence or regularly occupied building workers do count):

any employee of the facility

Groundwater Pathway

Identify any areas of karst terrain:

None in Fulton County

Identify additional population due to consideration of wells completed in overlying aquifers to the AOC: None

Do significant targets exist between 3 and 4 miles from the site?

No

Is the AOC a sole source aquifer according to Safe Drinking Water Act? (i.e., is the site located in Dade, Broward, Volusia, Putnam, or Flager County, Florida) No

Facility Name: ZEP Manufacturing Company

Location: 1310 Seaboard Industrial Boulevard
Atlanta Fulton County GA

EPA Region: Region IV

Person(s) in charge of the facility: Mr. Henry Maziar, President
Mr. Stephen Avary, Jr.
Engineering Manager

Name of Reviewer: Jack Taylor

Date: December 14, 1989

General description of facility:

(For example: Landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility, contamination route of major concern; types of information needed for rating; agency action, etc.)

This facility is located at 1310 Seaboard Industrial Boulevard, Fulton County, Atlanta, Georgia, approximately 1/2 mile east of the intersection of Chattahoochee Avenue and Marietta Boulevard (Georgia Hwy 3) in northwest Atlanta. The facility is engaged in the formulation and packaging of industrial cleaning compounds, disinfectants and pesticides. These activities are conducted indoors within several production buildings. Several tank farms and warehousing areas are associated with these activities.

Four solid waste management units (SWMUs) have been identified at this facility: the wastewater treatment plant sludge drying beds; the hazardous waste drum storage area; a neutralization tank in the Acid House production area; and the storage silo dust collectors at the Powder Building. Wastewater sludge has been determined non-hazardous. Hazardous substances at the facility consist primarily of solvents and acids. Contamination route of major concern is surface water, due to potential runoff from drum storage area.

Scores: $S_M = 9.34$ ($S_{gw} = 1.09$ $S_{sw} = 16.12$ $S_a = 0$)

$S_{FE} = 0$

$S_{DC} = 0$

Surface Water Pathway

Are there intakes located on the extended 15-mile migration pathway? Yes

Are there recreational areas, sensitive environments or human food chain targets (fisheries) along the extended pathway? Yes

Onsite Exposure Pathway

Is there waste or contaminated soil onsite at 2 feet below land surface or higher? Yes - contaminated soil

Is the site accessible to non-employees (workers do not count)? Yes

Are there residences, schools, or daycare centers onsite or in close proximity?

Yes - multi-family residences within 0.5 mile

Are there barriers to travel (e.g., a river) within one mile?

Yes - CSX railroad tracks to east

HRS REFERENCES

1. USGS 7.5 Minute Series Topographical Map, Northwest Atlanta, Georgia, Quad (1954, photorevised, 1983). U.S. Geological Survey, Reston, Virginia.
2. Cressler, C. W., C. J. Thurmond, and W. G. Hester. Groundwater in the Greater Atlanta Region, Georgia. Georgia Department of Natural Resources, Environmental Protection Division, Geologic Survey, Information Circular 63, 1983.
3. Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce, U.S. Government Printing Office, Washington, D.C., 1963, Figure 8.
4. Climatic Atlas of the United States. U. S. Department of Commerce, National Climatic Center, Asheville, North Carolina, 1979, Figures 4 and 5.
5. Walker, J.H., and others. Soil Survey - Fulton County Georgia. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the University of Georgia, College of Agriculture. Washington, D. C., U.S. Government Printing Office, 1949, pp. 1-4, and Sheets 41, 42, 46 and 47.
6. Lyons-Blount, Faye. Georgia Biennial Hazardous Waste Report - 1987, dated February 29, 1988. Georgia Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
7. Salter, William. Trip Report dated December 31, 1987. Georgia Department of Natural Resources, Environmental Protection Division, Industrial Waste Management Program files.
8. Public Works Department, City of Atlanta, 236 Forsyth Street, Atlanta, Georgia.

OVERSIZED

DOCUMENT

**PRELIMINARY ASSESSMENT COVER SHEET
ZEP MANUFACTURING COMPANY
GADO03267192**

I. HISTORY OF SITE

The Zep Manufacturing Company is located at 1310 Seaboard Industrial Blvd. in Atlanta, Georgia 30318. It has been operated by Zep Manufacturing Company since 1970. The owner of the facility is National Service Industries, Inc. of Atlanta, Georgia. The facility manufactures cleaning compounds, floor wax and pesticides. Prior to 1980, the company's neutralized liquid wastes, including wash water, were discharged into the county sewer system. Hazardous materials, flammable and strong powdered caustics were taken by Browning-Ferris to Crymes Landfill in Gwinnett County. Empty pesticide drums were sent to A & D Barrel and J & B Smith companies for reconditioning. A wastewater treatment system, currently treats raw sewage and other hazardous and non-hazardous wastewaters generated at the facility. The wastewater is discharged into the city's sewer system and sludge from the secondary clarifier is pumped into an aerobic sludge digester. After the sludge leaves the digester, it is spread onto sand drying beds. Pipes under the drying beds collect the sand bed filtrate and the filtrate is pumped back into the wastewater treatment system. The Part A Application for this facility has been withdrawn and the facility is currently classified as a generator of hazardous wastes.

II. NATURE OF HAZARDOUS MATERIALS

The hazardous materials generated at the facility are acids (376,848 lbs/yr) and waste cement (3,793 lbs/yr). The designed capacity of the wastewater treatment system is 70,000 gallons per day. All solid hazardous waste and drying bed sludge are stored in fifty-five gallon drums and shipped off-site to a TSD facility. The maximum number of drums expected per shipment is less than 10.

III. DESCRIPTION OF HAZARDOUS CONDITIONS, INCIDENTS, PERMIT VIOLATIONS

According to Mr. Robert P. Clein, Manager-Industrial Engineer for Zep Manufacturing Company, there were no spills at the site prior to 1980. On 6/4/82, GA EPD took soil samples at the facility, resulting from a call reporting buried leaking tanks containing acids and oil. Both samples were screened for phenols. No gross levels of phenols were found.

IV. ROUTES FOR CONTAMINATION

Any wastes spilled on site, may leave the site via surface water run-off and infiltration into the soil.

V. POSSIBLE AFFECTED POPULATION AND RESOURCES

The population within three miles of the site exceeds 250,000; since the site is located in the metropolitan area of Atlanta. No drinking water wells are believed to be in the area.

VI. RECOMMENDATIONS AND JUSTIFICATIONS

This facility is assessed a "Low" priority for a Site Inspection because:
1) there is limited information available on file concerning hazardous waste generation and disposal prior to 1980 and 2) there is no documentation that the soil contaminated from leaks in acid and oil storage tanks in 1982 was ever cleaned up.

VII. REFERENCE TO SUPPORTING DATA SOURCES

1. EPA Form 3510-1, 3510-3 (6/80), 11/17/80.
2. GA EPD Trips Reports, 5/13/76, 4/28/75, 2/15/83 and 6/22/84.
3. Letter, 6/9/76, RE: Zep Manufacturing Co. operating in compliance.
4. GA EPD Action Report: 5/6/82, RE: Buried tanks leaking on-site; 6/4/82, RE: Soil Samples Taken; Facility requested to remove contaminated soil.
5. Memorandum, 5/13/82; RE: Lab Analysis Report.
6. Hazardous Waste Facility Information Report, 2/15/83.
7. GA EPD Facility Checklist, 2/15/83.
8. Hazardous Waste Annual Reports, 1981 & 1982.
9. Laboratory Report, 8/25/82 RE: Contaminated Soil & Water.
10. Letter, 3/16/83, RE: Description of Elementary Neutralization Tank; Request for Withdrawal of Part A Application for Zep Manufacturing Company.
11. Letter, 4/25/83, RE: Acknowledgement of Withdrawal and Status Change to Generator for Zep Manufacturing Company from GA EPD.
12. Georgia Annual Hazardous Waste Report, 1983.
13. Letter, 1/31/84, RE: Hazardous Waste Disposal Prior to 1980.
14. Report, 8/14/84, RE: Chemical Waste Pretreatment and Activated Packed Bed Reactor.
15. Letter, 10/5/84, RE: Compliance Status Letter.
16. Letter, 4/12/85, RE: Notification of Hazardous Waste Activities.
17. Letter, 7/19/85, RE: Request for Accumulation Time Extension.
18. 9/13/85, RE: Permission for Wastewater Pretreatment Sludge Disposal at Watts Road Landfill.
19. Chemical Report (Law & Company) 8/12/85, RE: Dirt Sample.
20. Report, 8/31/85, RE: Sludge Sample from Sand Drying Beds.
21. Letter, 9/19/85, RE: Shipment of Hazardous Wastes.
22. Manifests, 9/19/85.
23. Letter, 10/31/85, RE: Landfill Disposal of Biological and Inorganic Sludge.
24. Site Management Form, 7/16/85.
25. Telephone Conversation Record, 12/11/85.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

ZEP Manufacturing Company

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

1310 Seaboard Industrial Blvd.

03 CITY

Atlanta

04 STATE

GA

05 ZIP CODE

30318

06 COUNTY

Fulton

07 COUNTY CODE

121

08 CONG DIST

06

09 COORDINATES LATITUDE

33° 48' 33.0"

LONGITUDE

084° 25' 43.0"

10 DIRECTIONS TO SITE (Starting from nearest public road)

The facility is located at the east of Seaboard Industrial Boulevard approximately 0.35 miles east of the intersection of Hills Avenue and Seaboard Industrial Boulevard

III. RESPONSIBLE PARTIES

01 OWNER (if known)

National Service Industries, Inc.

02 STREET (Business, mailing, residential)

P. O. Box 7158, STA. C

03 CITY

Atlanta

04 STATE

GA

05 ZIP CODE

30357

06 TELEPHONE NUMBER

404 892-2400

07 OPERATOR (if known and different from owner)

Zep Manufacturing Company

08 STREET (Business, mailing, residential)

P. O. Box 2015

09 CITY

Atlanta

10 STATE

GA

11 ZIP CODE

30301

12 TELEPHONE NUMBER

404 352-1680

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL

☐ C. STATE

☐ D. COUNTY

☐ E. MUNICIPAL

☐ F. OTHER:

☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3001 DATE RECEIVED: 11 / 17 / 80
MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (RCRA 103(i)) DATE RECEIVED: / /
MONTH DAY YEAR

☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 5 / 13 / 76
MONTH DAY YEAR

☐ NO

BY (Check all that apply)

☐ A. EPA

☐ B. EPA CONTRACTOR

☒ C. STATE

☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL

☐ F. OTHER:

(Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (Check one)

☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1956

present

☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
trichloroethane, polyphosphates, trichloroisocyanurate, waste cement (acetone, hexane styrene-butadiene rubber), sulfuric, hydrochloric, phosphoric and hydrofluoric acid, Malathion, benzene compounds

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

possible spills from tank storage area

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH

(Inspection required promptly)

☐ B. MEDIUM

(Inspection required)

☒ C. LOW

(Inspection on time available basis)

☐ D. NONE

(No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT

Mr. Robert P. Clein

02 OF (Agency/Organization)

Zep Manufacturing Company

03 TELEPHONE NUMBER

404, 352-1680

04 PERSON RESPONSIBLE FOR ASSESSMENT

Gilda A. Knowles G.A.K.

05 AGENCY

DNR-EPD

06 ORGANIZATION

Remedial Action

07 TELEPHONE NUMBER

404 656-7404

08 DATE

12 / 11 / 85
MONTH DAY YEAR

PM



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

☐ A SOLID ☐ E SLURRY
☒ B POWDER, FINES ☒ F LIQUID
☒ C SLUDGE ☐ G GAS

☐ D OTHER (Specify)

02 WASTE QUANTITY AT SITE

(Measures of waste quantities must be independent)

TONS

CUBIC YARDS unknown

NO OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

☒ A TOXIC ☐ E SOLUBLE ☐ I HIGHLY VOLATILE
☒ B CORROSIVE ☐ F INFECTIOUS ☐ J EXPLOSIVE
☐ C RADIOACTIVE ☒ G FLAMMABLE ☐ K REACTIVE
☐ D PERSISTENT ☐ H IGNITABLE ☐ L INCOMPATIBLE
L M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown	-	-
OLW	OILY WASTE			
SOL	SOLVENTS	3,793	lbs	annual volume (waste cement)
PSD	PESTICIDES	unknown	-	
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	376,848	lbs	annual volume
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	acid, raw sewage)	-	recycled back through system	-	-
PSD	Malathion	121-75-5	all materials used drums reconditioned		
ACD	Sulfuric Acid	7664-93-9	Recycled back through system		
	Hydrochloric Acid	7647-01-0			
	Phosphoric Acid	---			
	Hydrofluoric Acid	7664-39-3			
SOL	Acetone	-	Drums/Ashland Chemical Co.		
	Trichloroethane	25323-89-1			
	Hexane	-			
	Butadiene	106-99-0			
	Benzene	71-43-2			

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Sulfuric Acid	7664-93-9	FDS		
FDS	Hydrochloric Acid	7647-01-0	FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., site files, sample analysis, reports.)

GA - EPD STATE FILES
ZEP MANUFACTURING COMPANY; ATLANTA, GA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE
GA

02 SITE NUMBER
D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

possible spills from drum storage area

01 ☐ B SURFACE WATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ C CONTAMINATION OF AIR

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ D FIRE/EXPLOSIVE CONDITIONS

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ E DIRECT CONTACT

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ F CONTAMINATION OF SOIL

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: _____

(Acres)

04 NARRATIVE DESCRIPTION

01 ☐ G DRINKING WATER CONTAMINATION

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ H WORKER EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

01 ☐ I POPULATION EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
GA D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include name(s) of species)

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES

(Spills, runoff, standing liquids/leaking drums)

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED population within 3 miles radius of the site is greater than 250,000

IV. COMMENTS

site located in the heavy populated metropolitan area of Atlanta

V. SOURCES OF INFORMATION - Cite specific references, e.g., state files, sample analysis, reports

GA - EPD STATE FILES
ZEP MANUFACTURING CO., ATLANTA, GA

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

Page 1 of 1

EPA ID: GAD003267192 Site Name: ZEP MFG CO

State ID:

Alias Site Names: ZEP MFG CO

City: ATLANTA

County or Parish: FULTON

State: GA

Refer to Report Dated: 12/14/1989

Report Type: SITE INSPECTION 001

Report Developed by: STATE

34538

DECISION:

- ☒ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:
- ☒ 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)
- ☐ 1b. Site may qualify for action, but is deferred to:
- ☐ 2. Further Assessment Needed Under CERCLA:
- 2a. Priority: ☐ Higher ☐ Lower
- 2b. Other: (recommended action) NFRAP (No Further Remedial Action Planned)

DISCUSSION/RATIONALE:

A file review was conducted in November 1999 to correctly ascertain the CERCLA status of this site.

This site was an Environmental Priorities Initiative (EPI) site assigned to GA EPD for assessment per the EPI agreement. Due to low score, this site was NFRAP'd in 1990, but incorrectly deferred to RCRA.

The "deferred to RCRA" is hereby changed to "NFRAP."

Site Decision Made by: CAROLYN THOMPSON

Signature: _____

CB Thompson

11/30/99

Date: 08/15/1990

VI. RECOMMENDATIONS AND JUSTIFICATIONS

This facility is assessed a "Low" priority for a Site Inspection because:
1) there is limited information available on file concerning hazardous waste generation and disposal prior to 1980 and 2) there is no documentation that the soil contaminated from leaks in acid and oil storage tanks in 1982 was ever cleaned up.

VII. REFERENCE TO SUPPORTING DATA SOURCES

1. EPA Form 3510-1, 3510-3 (6/80), 11/17/80.
2. GA EPD Trips Reports, 5/13/76, 4/28/75, 2/15/83 and 6/22/84.
3. Letter, 6/9/76, RE: Zep Manufacturing Co. operating in compliance.
4. GA EPD Action Report: 5/6/82, RE: Buried tanks leaking on-site; 6/4/82, RE: Soil Samples Taken; Facility requested to remove contaminated soil.
5. Memorandum, 5/13/82; RE: Lab Analysis Report.
6. Hazardous Waste Facility Information Report, 2/15/83.
7. GA EPD Facility Checklist, 2/15/83.
8. Hazardous Waste Annual Reports, 1981 & 1982.
9. Laboratory Report, 8/25/82 RE: Contaminated Soil & Water.
10. Letter, 3/16/83, RE: Description of Elementary Neutralization Tank; Request for Withdrawal of Part A Application for Zep Manufacturing Company.
11. Letter, 4/25/83, RE: Acknowledgement of Withdrawal and Status-Change to Generator for Zep Manufacturing Company from GA EPD.
12. Georgia Annual Hazardous Waste Report, 1983.
13. Letter, 1/31/84, RE: Hazardous Waste Disposal Prior to 1980.
14. Report, 8/14/84, RE: Chemical Waste Pretreatment and Activated Packed Bed Reactor.
15. Letter, 10/5/84, RE: Compliance Status Letter.
16. Letter, 4/12/85, RE: Notification of Hazardous Waste Activities.
17. Letter, 7/19/85, RE: Request for Accumulation Time Extension.
18. 9/13/85, RE: Permission for Wastewater Pretreatment Sludge Disposal at Watts Road Landfill.
19. Chemical Report (Law & Company) 8/12/85, RE: Dirt Sample.
20. Report, 8/31/85, RE: Sludge Sample from Sand Drying Beds.
21. Letter, 9/19/85, RE: Shipment of Hazardous Wastes.
22. Manifests, 9/19/85.
23. Letter, 10/31/85, RE: Landfill Disposal of Biological and Inorganic Sludge.
24. Site Management Form, 7/16/85.
25. Telephone Conversation Record, 12/11/85.

GAK/mcw012



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

ZEP Manufacturing Company

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

1310 Seaboard Industrial Blvd.

03 CITY

Atlanta

04 STATE

GA

05 ZIP CODE

30318

06 COUNTY

Fulton

07 COUNTY CODE

121

08 CONG DIST

06

09 COORDINATES LATITUDE

33° 48' 33.0"

LONGITUDE

084° 25' 43.0"

10 DIRECTIONS TO SITE (Starting from nearest public road)

The facility is located at the east of Seaboard Industrial Boulevard approximately 0.35 miles east of the intersection of Hills Avenue and Seaboard Industrial Boulevard

III. RESPONSIBLE PARTIES

01 OWNER (if known)

National Service Industries, Inc.

02 STREET (Business, mailing, residential)

P. O. Box 7158, STA. C

03 CITY

Atlanta

04 STATE

GA

05 ZIP CODE

30357

06 TELEPHONE NUMBER

(404) 892-2400

07 OPERATOR (if known and different from owner)

Zep Manufacturing Company

08 STREET (Business, mailing, residential)

P. O. Box 2015

09 CITY

Atlanta

10 STATE

GA

11 ZIP CODE

30301

12 TELEPHONE NUMBER

(404) 352-1680

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL:

(Agency name)

☐ C. STATE

☐ D. COUNTY

☐ E. MUNICIPAL

☐ F. OTHER:

(Specify)

☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3001 DATE RECEIVED: 11 / 17 / 80
MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (RCRA 103(i)) DATE RECEIVED: / /
MONTH DAY YEAR

☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE 5 / 13 / 76
MONTH DAY YEAR

☐ NO

BY (Check all that apply)

☐ A. EPA

☐ B. EPA CONTRACTOR

☒ C. STATE

☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER

(Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (Check one)

☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION

1956

present

☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

trichloroethane, polyphosphates, trichloroisocyanurate, waste cement (acetone, hexane styrene-butadiene rubber), sulfuric, hydrochloric, phosphoric and hydrofluoric acid, Malathion, benzene compounds

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

possible spills from tank storage area

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one if high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH

(Inspection required promptly)

☐ B. MEDIUM

(Inspection required)

☒ C. LOW

(Inspect on time available basis)

☐ D. NONE

(No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT

Mr. Robert P. Clein

02 OF (Agency/Organization)

Zep Manufacturing Company

03 TELEPHONE NUMBER

404, 352-1680

04 PERSON RESPONSIBLE FOR ASSESSMENT

Gilda A. Knowles G.A.K.

05 AGENCY

DNR-EPD

06 ORGANIZATION

Remedial Action

07 TELEPHONE NUMBER

404 656-7404

08 DATE

12 / 11 / 85

MONTH DAY YEAR

PM filed



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

Q1 STATE: GA Q2 SITE NUMBER: D003267192

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply) <input type="checkbox"/> A SOLID <input checked="" type="checkbox"/> B POWDER, FINES <input checked="" type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER (Specify) _____ <input type="checkbox"/> E SLURRY <input checked="" type="checkbox"/> F LIQUID <input type="checkbox"/> G GAS	02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent) TONS _____ CUBIC YARDS <u>unknown</u> NO OF DRUMS _____	03 WASTE CHARACTERISTICS (Check all that apply) <input checked="" type="checkbox"/> A TOXIC <input checked="" type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input checked="" type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
---	--	---

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown	-	-
OLW	OILY WASTE			
SOL	SOLVENTS	3,793	lbs	annual volume (waste cement)
PSD	PESTICIDES	unknown	-	
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	376,848	lbs	annual volume
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	acid, raw sewage)	-	recycled back through system	-	-
PSD	Malathion	121-75-5	all materials used drums reconditioned		
ACD	Sulfuric Acid	7664-93-9	Recycled back through system		
	Hydrochloric Acid	7647-01-0			
	Phosphoric Acid	----			
	Hydrofluoric Acid	7664-39-3			
SOL	Acetone	-	Drums/Ashland Chemical Co.		
	Trichloroethane	25323-89-1			
	Hexane	-			
	Butadiene	106-99-0			
	Benzene	71-43-2			

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Sulfuric Acid	7664-93-9	FDS		
FDS	Hydrochloric Acid	7647-01-0	FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g. site files, sample analysis, reports)

GA - EPD STATE FILES
ZEP MANUFACTURING COMPANY; ATLANTA, GA



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
possible spills from drum storage area

01 ☐ B SURFACE WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ C CONTAMINATION OF AIR 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ D FIRE/EXPLOSIVE CONDITIONS 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ E DIRECT CONTACT 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ F CONTAMINATION OF SOIL 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

01 ☐ G DRINKING WATER CONTAMINATION 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ H WORKER EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ I POPULATION EXPOSURE/INJURY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
GA D003267192

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION (include names of species)

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ L. CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES
(Spills, runoff, standing liquids, leaking drums)

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED population within 3 miles radius of the site is greater than 250,000

IV. COMMENTS

site located in the heavy populated metropolitan area of Atlanta

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, report)

GA - EPD STATE FILES
ZEP MANUFACTURING CO., ATLANTA, GA

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IV

Page 1 of 1

EPA ID: GAD003267192 Site Name: ZEP MFG CO

State ID:

Alias Site Names: ZEP MFG CO

City: ATLANTA

County or Parish: FULTON

State: GA

Refer to Report Dated: 12/14/1989

Report Type: SITE INSPECTION 001

Report Developed by: STATE

34538

DECISION:

- ☒ 1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:
- ☒ 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)
- ☐ 1b. Site may qualify for action, but is deferred to:
- ☐ 2. Further Assessment Needed Under CERCLA:
- 2a. Priority: ☐ Higher ☐ Lower
- 2b. Other: (recommended action) NFRAP (No Further Remedial Action Planned)

DISCUSSION/RATIONALE:

A file review was conducted in November 1999 to correctly ascertain the CERCLA status of this site.

This site was an Environmental Priorities Initiative (EPI) site assigned to GA EPD for assessment per the EPI agreement. Due to low score, this site was NFRAP'd in 1990, but incorrectly deferred to RCRA.

The "deferred to RCRA" is hereby changed to "NFRAP."

Site Decision Made by: CAROLYN THOMPSON

Signature: _____

CB Thompson

11/30/99

Date: 08/15/1990

Project Note

Date: 2/27/01
Time: 9:40

ZEP Manufacturing Co.
Atlanta, Fulton County, Georgia
EPA ID Number: GAD003267192

Organization: TN & Assoc., Inc.,
Reg. 4 EPA STAT Contract

Name: John E. Axelson Signature: _____

Subject: Facility/Tax Records - Ownership

I spoke with Reshanda Slaughter at the Fulton County tax assessors office. Reshanda works for fiscal support (404-730-6440) and was able to access the tax records for the ZEP Manufacturing facility. She said the records indicated that National Services Industries was the owner from 1991 to present. Her records only go back to 1991. She said she would mail me a copy of the record for documentation.

This information correlates to the preliminary assessment report which documents that National Service Industries constructed and began to operate the facility in 1956. The ownership has remained unchanged.

RESPONSE REQUIRED

☒ None ☐ Phone call ☐ Memo ☐ Letter ☐ Report

cc: ☒ File ☐ Project Manager ☐ Principal Investigator ☐ Other (specify)



BRS Reports

BRS Facility Summary Report

Facility Information:

<u>HANDLER NAME:</u>	ZEP MANUFACTURING COMPANY	<u>HANDLER ID:</u>	GAD003267192
<u>STREET 1:</u>	1310 SEABOARD INDUSTRIAL BLVD.	<u>REPORTING YEAR:</u>	1997
<u>STREET 2:</u>			
<u>CITY:</u>	ATLANTA	<u>GENERATOR STATUS:</u>	1 = LQG
<u>STATE:</u>	GA	<u>ONSITE PERMITTED STORAGE:</u>	1 = No RCRA Storage
<u>ZIP CODE:</u>	30318	<u>ONSITE PERMITTED TREATMENT:</u>	1 = NO TDR/NO RCRA PLAN
<u>COUNTY:</u>	FULTON	<u>ONSITE EXEMPT TREATMENT:</u>	=

Mailing Information:

<u>HANDLER NAME:</u>	ZEP MANUFACTURING COMPANY
<u>STREET 1:</u>	1310 SEABOARD INDUSTRIAL BLVD.
<u>STREET 2:</u>	
<u>CITY:</u>	ATLANTA
<u>STATE:</u>	GA
<u>ZIP CODE:</u>	30318

Basic Waste Information:

Note: Please note that the wastes shown in the following table are in tons.

WASTE TYPE	NATIONAL REPORT	FEDERAL WASTE	TOTAL WASTE
GENERATION		274	274
MANAGEMENT			
WASTE RECEIVED			
WASTE SHIPPED		274	274
INCINERATION			
DISPOSAL			
ACUTE GENERATION			

BRS Facility Waste Detail Report

Generated Waste Shipped To Offsite Facilities:

OFFSITE FACILITY ID: ALD981020894

NAME: FISHER INDUSTRIAL SERVICE INC.

ADDRESS: 402 WEBSTER CHAPEL RD
GLENCOE, AL 359050000

TONS SENT	TONS GENERATED	ORIGIN CODE	FORM CODE	SOURCE CODE	WASTE CODE1	WASTE CODE2	WASTE CODE3	WASTE CODE4	WASTE CODE5	REMAINING WASTE CODES	WASTE NUM
4.675	4.675	1 = PRDCTN/SERVICE ACT.	B105 = Acidic aqueous waste	A57 = Discard off-spec mat	D001 = Ignitable waste	D002 = Corrosive waste					>1000051

OFFSITE FACILITY ID: GAD033582461**NAME:** ALTERNATE ENERGY RESOURCES, INC.**ADDRESS:** 2730 Walden Drive
Augusta, GA 309045520

<u>TONS SENT</u>	<u>TONS GENERATED</u>	<u>ORIGIN CODE</u>	<u>FORM CODE</u>	<u>SOURCE CODE</u>	<u>WASTE CODE1</u>	<u>WASTE CODE2</u>	<u>WASTE CODE3</u>	<u>WASTE CODE4</u>	<u>WASTE CODE5</u>	<u>REMAINING WASTE CODES</u>
20.36	20.36	1 = PRDCTN/SERVICE ACT.	B204 = Hal/Nonhal solv mix	A09 = Cln Out Proc Equip	D001 = Ignitable waste	D018 = Benzene	D026 = Cresol	D039 = Tetrachloroethylene		

OFFSITE FACILITY ID: MID000724831**NAME:** MICHIGAN DISPOSAL WASTE TREATMENT PLANT**ADDRESS:** 49350 N. I-94 SERVICE DRIVE
BELLEVILLE, MI 481110000

<u>TONS SENT</u>	<u>TONS GENERATED</u>	<u>ORIGIN CODE</u>	<u>FORM CODE</u>	<u>SOURCE CODE</u>	<u>WASTE CODE1</u>	<u>WASTE CODE2</u>	<u>WASTE CODE3</u>	<u>WASTE CODE4</u>	<u>WASTE CODE5</u>	<u>REMAINING WASTE CODES</u>	<u>WASTE NUM</u>
33.121	33.121	1 = PRDCTN/SERVICE ACT.	B101 = Aq. wst/low solvents	A57 = Discard off-spec mat	D002 = Corrosive waste						>1000041

OFFSITE FACILITY ID: NCD121700777**NAME:** HERITAGE ENVIRONMENTAL SERVICES INC**ADDRESS:** 4132 POMPAÑO RD
CHARLOTTE, NC 282163466

<u>TONS SENT</u>	<u>TONS GENERATED</u>	<u>ORIGIN CODE</u>	<u>FORM CODE</u>	<u>SOURCE CODE</u>	<u>WASTE CODE1</u>	<u>WASTE CODE2</u>	<u>WASTE CODE3</u>	<u>WASTE CODE4</u>	<u>WASTE CODE5</u>	<u>REMAINING WASTE CODES</u>	<u>WASTE NUM</u>
.135	.135	1 = PRDCTN/SERVICE	B319 = Oth wst	A56 = Discontnue	D009 =						>1000061

		ACT.	inorg solids	proc equip	mercury						
--	--	------	-----------------	---------------	---------	--	--	--	--	--	--

OFFSITE FACILITY ID: SCD036275626

NAME: SOUTHEASTERN CHEMICALS & SOLVENTS CO

ADDRESS: 755 INDUSTRIAL RD
SUMTER, SC 291500000

<u>TONS SENT</u>	<u>TONS GENERATED</u>	<u>ORIGIN CODE</u>	<u>FORM CODE</u>	<u>SOURCE CODE</u>	<u>WASTE CODE1</u>	<u>WASTE CODE2</u>	<u>WASTE CODE3</u>	<u>WASTE CODE4</u>	<u>WASTE CODE5</u>	<u>REMAIN WAS7 CODI</u>
122.584	122.584	1 = PRDCTN/SERVICE ACT.	B204 = Hal/Nonhal solv mix	A09 = Cln Out Proc Equip	D001 = Ignitable waste	D018 = Benzene	D026 = Cresol	D039 = Tetrachloroethylene		
90.512	90.512	1 = PRDCTN/SERVICE ACT.	B202 = Halogenated solvent	A09 = Cln Out Proc Equip	F002					
2.162	2.162	1 = PRDCTN/SERVICE ACT.	B202 = Halogenated solvent	A57 = Discard off-spec mat	D026 = Cresol					

Generated Waste Managed On Site:

Note: EPA has no records of Generated Waste Managed On Site for this Facility.

Waste Received From Offsite Facilities:

Note: EPA has no records of Waste Received From Offsite Facilities for this Facility.

Project Note

Date: 3/9/01
Time: 11:55

ZEP Manufacturing Co.
Atlanta, Fulton County, Georgia
EPA ID Number: GAD003267192

Organization: TN & Assoc., Inc.,
Reg. 4 EPA STAT Contract

Name: John E. Axelson Signature: _____

Subject: Air Permit

I spoke with Ender Serefli (404-363-7123) concerning air permits for the ZEP Manufacturing facility. Mr. Serefli said that only one air permit existed for the facility. It is a permit issued by the Air Protection Branch under the State Implementation Program (SIP). The permit can be referenced by SIP # 2899-060-1068-5. Mr. Serefli said that the facility had recently been inspected (May 11, 1999) for air emission compliance. I asked him if there had been any violations. He said that there were only general comments including the need for hatches on mixing tanks to be closed, and there was a comment that maintenance should be contacted concerning control devices.

RESPONSE REQUIRED

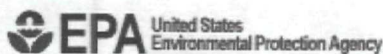
☒ None ☐ Phone call ☐ Memo ☐ Letter ☐ Report

cc: ☒ File ☐ Project Manager ☐ Principal Investigator ☐ Other (specify)

Total Aggregate Releases of TRI Chemicals to the Environment:

Please note that all release amounts are reported in pounds. For all releases estimated as a range, the mid-point of the range was used in these calculations. This table summarizes the releases reported by the facility. NR - signifies nothing reported by this facility for the corresponding medium.

Media	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987
Air Emissions	9395	8905	8455	17696	8903	10388	10590	13543	292505	434684	14261	19529
Surface Water Discharges	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	9
Releases to Land	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total On-Site Releases	9395	8905	8455	17696	8903	10388	10590	13543	292505	434684	14261	19538
Transfer Off-Site to Disposal	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total Releases	9395	8905	8455	17696	8903	10388	10590	13543	292505	434684	14261	19538



**ENVIROFACTS REPORT ON
ZEP MANUFACTURING COMPANY
1320 SEABOARD INDL. BLVD.
ATLANTA, GA 30318**

Map this facility

Map this facility using one of Envirofact's mapping utilities.

EPA Facility Information

This query was executed on FEB-28-2001

Superfund Information (CERCLIS)

SUPERFUND SITE ID: 0401311 **SITE SMSA:** 0520
OWNERSHIP STATUS: Other **FEDERAL FACILITY:** N
NPL STATUS: Not on the NPL **SITE INCIDENT TYPE:**

Additional Information can be obtained from the Superfund [CERCLIS](#) Query.

Additional Superfund Site information may be obtained through EPA's [Superfund](#) web site. Their [query pages](#) provide an alternative method for retrieving Superfund Site information.

Toxic Releases for Reporting Year 1998

TRI FACILITY ID: 30318ZPMNF1310S

SIC Codes for 1998

SIC CODE	SIC CODE DESCRIPTION
2841	SOAP AND OTHER DETERGENTS, EXCEPT SPECIALTY CLEANERS
2842	SPECIALTY CLEANING, POLISHING, AND SANITATION PREPARATIONS
2843	SURFACE ACTIVE AGENTS, FINISHING AGENTS, SULFONATED OILS, AND ASSISTANTS

2844	PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS
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Chemicals Transferred to other Sites

<u>CHEMICAL NAME</u>	<u>TRI CHEM ID</u>	<u>DOCUMENT</u>	<u>RELEASE AMOUNTS LBS/YR</u>	<u>RELEASE BASIS CODE</u>	<u>TYPE OF WASTE MANAGEMENT</u>
<u>1,1,1-TRICHLOROETHANE</u>	000071556	1398120509068	300	OTHER	ENERGY RECOVERY
<u>1,1-DICHLORO-1- FLUOROETHANE</u>	001717006	1398120509031	1565	OTHER	ENERGY RECOVERY
<u>DICHLOROMETHANE</u>	000075092	1398120509043	8000	OTHER	ENERGY RECOVERY
<u>METHANOL</u>	000067561	1398120509070	12180	OTHER	ENERGY RECOVERY
<u>N-HEXANE</u>	000110543	1398120508991	11600	OTHER	ENERGY RECOVERY
<u>TETRACHLOROETHYLENE</u>	000127184	1398120508989	6600	OTHER	ENERGY RECOVERY
<u>TOLUENE</u>	000108883	1398120509005	1160	OTHER	ENERGY RECOVERY
<u>TRICHLOROETHYLENE</u>	000079016	1398120509017	13000	OTHER	ENERGY RECOVERY
<u>XYLENE (MIXED ISOMERS)</u>	001330207	1398120509056	2675	OTHER	ENERGY RECOVERY

Chemicals Released to Air

<u>CHEMICAL NAME</u>	<u>TRI CHEM ID</u>	<u>DOCUMENT</u>	<u>RELEASE AMOUNTS LBS/YR</u>	<u>RELEASE BASIS CODE</u>	<u>FUGITIVE OR STACK INDICATOR</u>
<u>1,1,1-TRICHLOROETHANE</u>	000071556	1398120509068	15	OTHER	FUGITIVE OR NON- POINT EMISSIONS
<u>1,1,1-TRICHLOROETHANE</u>	000071556	1398120509068	15	OTHER	STACK OR POINT

					EMISSIONS
<u>1,1-DICHLORO-1-FLUOROETHANE</u>	001717006	1398120509031	335	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>1,1-DICHLORO-1-FLUOROETHANE</u>	001717006	1398120509031	450	OTHER	STACK OR POINT EMISSIONS
CERTAIN GLYCOL ETHERS	N230	1398120509029	35	OTHER	FUGITIVE OR NON-POINT EMISSIONS
CERTAIN GLYCOL ETHERS	N230	1398120509029	35	OTHER	STACK OR POINT EMISSIONS
<u>DICHLOROMETHANE</u>	000075092	1398120509043	890	OTHER	STACK OR POINT EMISSIONS
<u>DICHLOROMETHANE</u>	000075092	1398120509043	1150	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>METHANOL</u>	000067561	1398120509070	175	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>METHANOL</u>	000067561	1398120509070	175	OTHER	STACK OR POINT EMISSIONS
<u>N-HEXANE</u>	000110543	1398120508991	2440	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>N-HEXANE</u>	000110543	1398120508991	2550	OTHER	STACK OR POINT EMISSIONS
<u>TETRACHLOROETHYLENE</u>	000127184	1398120508989	70	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>TETRACHLOROETHYLENE</u>	000127184	1398120508989	70	OTHER	STACK OR POINT EMISSIONS
<u>TOLUENE</u>	000108883	1398120509005	25	OTHER	STACK OR POINT EMISSIONS

<u>TOLUENE</u>	000108883	1398120509005	30	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>TRICHLOROETHYLENE</u>	000079016	1398120509017	400	OTHER	FUGITIVE OR NON-POINT EMISSIONS
<u>TRICHLOROETHYLENE</u>	000079016	1398120509017	500	OTHER	STACK OR POINT EMISSIONS
<u>XYLENE (MIXED ISOMERS)</u>	001330207	1398120509056	15	OTHER	STACK OR POINT EMISSIONS
<u>XYLENE (MIXED ISOMERS)</u>	001330207	1398120509056	20	OTHER	FUGITIVE OR NON-POINT EMISSIONS

Chemicals Released via Underground Injection

There was no data of this type reported for this facility.

Chemicals Released to Land

There was no data of this type reported for this facility.

Chemicals Released to Surface Water

There was no data of this type reported for this facility.

Additional Information can be obtained from the Toxics Release Inventory System [TRIS](#) Query.

The Environmental Defense Fund's (EDF) Chemical Scorecard has on-line environmental information regarding this [EXIT EPA](#) facility's reported TRI releases. This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

AIRS / AFS Information

PLANT NAME:	ZEP MANUFACTURING CO	COMPLIANCE SYSTEM PLANT ID:	00507
AFS PLANT ID:		NATIONAL EMISSIONS DATA SYSTEM PLANT ID:	
LATITUDE:	0	LONGITUDE:	0
DUNS NUMBER:		PRINCIPAL PRODUCT:	
INVENTORY YEAR:		EMERGENCY CONTROL:	
CLASS CODE:	POTENTIAL UNCONTROLLED EMISSIONS < 100 TONS/YR	COMPLIANCE STATUS:	IN COMPLIANCE - INSPECTION

The current AIRS/AFS database does not have any pollutant data for this facility.

RCRIS Information

HANDLER ID: GAD003267192

Standard Industrial Classification:

<u>SIC CODE</u>	<u>SIC DESCRIPTION</u>
2841	SOAP AND OTHER DETERGENTS, EXCEPT SPECIALTY CLEANERS
2842	SPECIALTY CLEANING, POLISHING, AND SANITATION PREPARATIONS
2843	SURFACE ACTIVE AGENTS, FINISHING AGENTS, SULFONATED OILS, AND ASSISTANTS

Handler/Facility Classification:

<u>HANDLER TYPE</u>	<u>LAND DISPOSAL</u>	<u>INCINERATOR</u>	<u>BOILER AND/OR INDUSTRIAL FURNACE</u>	<u>STORAGE AND TREATMENT</u>
LARGE QTY GENERATOR				

Additional Information can be obtained from Resource Conservation and Recovery Information System **RCRIS** Query.

BRS Information

Facility Information:

HANDLER ID:	GAD003267192	REPORTING YEAR:	1997
GENERATOR STATUS:	1 = LQG	ONSITE PERMITTED STORAGE:	1 = No RCRA Storage
ONSITE PERMITTED TREATMENT:	1 = NO TDR/NO RCRA PLAN	ONSITE EXEMPT TREATMENT:	=

Waste Information:

Note: Please note that the wastes shown in the following table are in tons.

WASTE TYPE	STATE WASTE	FEDERAL WASTE	TOTAL WASTE
INCERNATION			
DISPOSAL			
ACUTE GENERATION	2	2	2
WASTE SHIPPED	226	226	226
GENERATION	226	226	226
WASTE RECEIVED			
MANAGEMENT			

Additional information can be obtained from the Biennial Reporting System **BRS** Query.

RMP Information (RMP)

RMP FACILITY ID:	100000085524	LAST POSTMARK DATE:	18-JUN-99
LAST RECEIPT DATE:	21-JUN-99	RMP COMPLETE?:	YES
DEREGISTRATION DATE:		PHONE NUMBER:	
E-MAIL ADDRESS:		WEB ADDRESS:	
LEPC:	Fulton County LEPC	REPORTABLE ACCIDENTS REPORTED?:	YES

PROCESS INFORMATION:

NAICS CODES	NAICS NAMES	PROGRAM LEVEL
32561		3

CHEMICAL NAME	CAS NUMBER	FLAMMABLE TOXIC
Isobutane [Propane, 2-methyl]	75-28-5	F
Propane	74-98-6	F

Project Note

Date: 3/8/01
Time: 9:10

ZEP Manufacturing Co.
Atlanta, Fulton County, Georgia
EPA ID Number: GAD003267192

Organization: TN & Assoc., Inc.,
Reg. 4 EPA STAT Contract

Name: John E. Axelson Signature: _____

Subject: Industrial Waste Water Permits

I spoke with Stacey Allman (404-675-1743) Secretary for the Georgia Open Records Act, Water Protection Branch of the Georgia-EPD. Ms. Allman searched her records for any industrial waste water permits for the ZEP facility. No permits were found. This search would have documented any Industrial Waste Water Permits (including NPDES or Land Application System permits) if they existed for the facility.

RESPONSE REQUIRED

☒ None ☐ Phone call ☐ Memo ☐ Letter ☐ Report

cc: ☒ File ☐ Project Manager ☐ Principal Investigator ☐ Other (specify)

Names and Amounts of Chemicals Released to the Environment by Year.

Please note that all release amounts are reported in pounds. For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989
<u>1,1,1-TRICHLOROETHANE</u> (TRI Chemical ID: 000071556)	<u>AIR FUG</u>	15	15	30	2380	2888	3096	4968	5165	156000	128
<u>1,1,1-TRICHLOROETHANE</u> (TRI Chemical ID: 000071556)	<u>AIR STACK</u>	15	15	30	NR	1220	1355	2569	1984	NR	NR
<u>1,1,1-TRICHLOROETHANE</u> (TRI Chemical ID: 000071556)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<u>1,1-DICHLORO-1-FLUOROETHANE</u> (TRI Chemical ID: 001717006)	<u>AIR FUG</u>	335	300	300	780	NR	NR	NR	NR	NR	NR
<u>1,1-DICHLORO-1-FLUOROETHANE</u> (TRI Chemical ID: 001717006)	<u>AIR STACK</u>	450	400	400	NR	NR	NR	NR	NR	NR	NR
<u>1,2-DICHLOROBENZENE</u> (TRI Chemical ID: 000095501)	<u>AIR FUG</u>	NR	NR	NR	NR	NR	8	8	NR	56	54
<u>1,4-DICHLOROBENZENE</u> (TRI Chemical ID: 000106467)	<u>AIR FUG</u>	NR	NR	NR	22	24	24	27	36	720	697
<u>1,4-DICHLOROBENZENE</u> (TRI Chemical ID: 000106467)	<u>AIR STACK</u>	NR	NR	NR	NR	2	2	4	7	NR	NR
<u>AMMONIA</u> (TRI Chemical ID: 007664417)	<u>AIR FUG</u>	NR	NR	NR	NR	NR	NR	NR	NR	1800	1959
<u>CERTAIN GLYCOL ETHERS</u> (TRI Chemical ID: N230)	<u>AIR FUG</u>	35	30	20	500	401	401	400	675	15	15
<u>CERTAIN GLYCOL ETHERS</u> (TRI Chemical ID: N230)	<u>AIR STACK</u>	35	30	30	NR	6	6	0	0	NR	NR
<u>CRESOL (MIXED ISOMERS)</u> (TRI Chemical ID:)	<u>AIR FUG</u>	NR	NR	0	25	23	22	22	31	200	377

001319773)												
<u>CRESOL (MIXED ISOMERS)</u> (TRI Chemical ID: 001319773)	<u>AIR STACK</u>	NR	NR	0	NR	2	1	1	1	NR	NR	
<u>CRESOL (MIXED ISOMERS)</u> (TRI Chemical ID: 001319773)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>DICHLOROMETHANE</u> (TRI Chemical ID: 000075092)	<u>AIR FUG</u>	1150	1300	1300	4800	1904	2660	2	2257	100000	134786	
<u>DICHLOROMETHANE</u> (TRI Chemical ID: 000075092)	<u>AIR STACK</u>	890	1000	1000	NR	893	1276	768	923	NR	NR	
<u>DICHLOROMETHANE</u> (TRI Chemical ID: 000075092)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>DIETHANOLAMINE</u> (TRI Chemical ID: 000111422)	<u>AIR FUG</u>	NR	NR	NR	NR	NR	20	NR	5	100	92	
<u>DIETHANOLAMINE</u> (TRI Chemical ID: 000111422)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>ETHYLENE GLYCOL</u> (TRI Chemical ID: 000107211)	<u>AIR FUG</u>	NR	NR	NR	NR	10	10	10	13	1	1	
<u>ETHYLENE GLYCOL</u> (TRI Chemical ID: 000107211)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>FORMALDEHYDE</u> (TRI Chemical ID: 000050000)	<u>AIR FUG</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>FORMALDEHYDE</u> (TRI Chemical ID: 000050000)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>FREON 113</u> (TRI Chemical ID: 000076131)	<u>AIR FUG</u>	NR	NR	NR	NR	NR	248	471	900	19000	42850	
<u>FREON 113</u> (TRI Chemical ID: 000076131)	<u>AIR STACK</u>	NR	NR	NR	NR	NR	162	337	377	NR	NR	
<u>HYDROCHLORIC ACID</u> (1995 AND AFTER "ACID AEROSOLS" ONLY)	<u>AIR</u>	NR	NR	NR	NR	0	0	0	0	0	238007	

(TRI Chemical ID: 007647010)	<u>FUG</u>											
<u>HYDROGEN FLUORIDE</u> (TRI Chemical ID: 007664393)	<u>AIR FUG</u>	0	0	0	0	0	0	0	0	0	0	0
<u>METHANOL</u> (TRI Chemical ID: 000067561)	<u>AIR FUG</u>	175	200	200	690	542	507	460	537	7000	7044	
<u>METHANOL</u> (TRI Chemical ID: 000067561)	<u>AIR STACK</u>	175	200	200	NR	189	172	150	152	NR	NR	
<u>N-HEXANE</u> (TRI Chemical ID: 000110543)	<u>AIR FUG</u>	2440	2100	1900	3600	NR	NR	NR	NR	NR	NR	
<u>N-HEXANE</u> (TRI Chemical ID: 000110543)	<u>AIR STACK</u>	2550	2200	2000	NR	NR	NR	NR	NR	NR	NR	
<u>PHENOL</u> (TRI Chemical ID: 000108952)	<u>AIR FUG</u>	NR	NR	NR	9	8	8	8	10	13	21	
<u>PHOSPHORIC ACID</u> (TRI Chemical ID: 007664382)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>TETRACHLOROETHYLENE</u> (TRI Chemical ID: 000127184)	<u>AIR FUG</u>	70	60	60	270	218	184	170	184	4700	6024	
<u>TETRACHLOROETHYLENE</u> (TRI Chemical ID: 000127184)	<u>AIR STACK</u>	70	60	60	NR	60	43	40	46	NR	NR	
<u>TOLUENE</u> (TRI Chemical ID: 000108883)	<u>AIR FUG</u>	30	35	30	70	71	63	62	89	1300	1137	
<u>TOLUENE</u> (TRI Chemical ID: 000108883)	<u>AIR STACK</u>	25	25	20	NR	32	27	24	26	NR	NR	
<u>TOLUENE</u> (TRI Chemical ID: 000108883)	<u>WATER</u>	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
<u>TRICHLOROETHYLENE</u> (TRI Chemical ID: 000079016)	<u>AIR FUG</u>	400	400	375	4490	165	NR	NR	NR	NR	NR	
<u>TRICHLOROETHYLENE</u> (TRI Chemical ID: 000079016)	<u>AIR STACK</u>	500	500	475	NR	152	NR	NR	NR	NR	NR	
<u>XYLENE (MIXED ISOMERS)</u>	<u>AIR</u>											

(TRI Chemical ID: 001330207)	FUG	20	20	15	00	00	00	77	111	1000	1472
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	AIR STACK	15	15	10	NR	13	13	12	14	NR	NR
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	WATER	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

Discharge of Chemicals into Streams or Bodies of Water:

Please note that all release amounts are reported in pounds. For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Release Amount equal to "0" were not listed.

<u>Chemical Name</u>	<u>Year</u>	<u>Release Amount (Pounds)</u>	<u>Stream Or Body of Water</u>
1,1,1-TRICHLOROETHANE (TRI Chemical ID: 000071556)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
CRESOL (MIXED ISOMERS) (TRI Chemical ID: 001319773)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
DICHLOROMETHANE (TRI Chemical ID: 000075092)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
DIETHANOLAMINE (TRI Chemical ID: 000111422)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
FORMALDEHYDE (TRI Chemical ID: 000050000)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
PHOSPHORIC ACID (TRI Chemical ID: 007664382)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
TOLUENE (TRI Chemical ID: 000108883)	1987	1	UNNAMED FEEDER CREEK TO PEACHT
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1987	1	UNNAMED FEEDER CREEK TO PEACHT

T

Project Note

Date: 3/8/01
Time: 13:00

ZEP Manufacturing Co.
Atlanta, Fulton County, Georgia
EPA ID Number: GAD003267192

Organization: TN & Assoc., Inc.,
Reg. 4 EPA STAT Contract

Name: John E. Axelson Signature: _____

Subject: General Storm Water Permit

I spoke with Environmental Specialist, Chip Scroggs (404-675-1633) concerning a general, non point source storm water permit for the ZEP Manufacturing Facility. He said that ZEP had recently submitted a Notice of Intent form to comply with the Georgia-EPD rules and regulations concerning non point source storm water. Among other things, these regulations mandate that industrial facilities implement a Storm Water Pollution Prevention Plan and Best Management Practices to control non point source impacts to storm water. The plan is not required to be submitted to the EPD, however, the plan should be available for review at the site.

RESPONSE REQUIRED

(x) None () Phone call () Memo () Letter () Report

cc: (x) File () Project Manager () Principal Investigator () Other (specify)

Information provided by the [Southeast Regional Climate Center](#). (Disclaimer)

Date obtained: January, 1997

Growing Season Summary
 Station: (90451) ATLANTA WSO AIRPORT
 Years: 1961 To 1990 Missing Data: 0.0%

Base Temp	Date of Last Spring Occurrence					Date of First Fall Occurrence				
	Median	Early	90%	10%	Late	Median	Early	10%	90%	Late
32	3/27	2/16	3/02	4/18	4/23	11/13	10/25	10/29	11/30	12/06
28	3/10	2/09	2/15	3/30	4/11	11/23	10/29	11/05	12/15	12/24
24	2/27	1/19	2/07	3/17	3/30	12/09	11/04	11/16	12/24	12/26
20	2/13	1/10	1/20	3/03	3/05	12/15	11/14	11/24	12/25	12/29
16	2/05	1/06	1/15	2/26	3/04	12/18	11/23	12/04	12/25	12/24

Base Temp	Length of Season (Days)				
	Median	Shortest	10%	90%	Longest
32	228	192	208	259	289
28	261	213	232	288	302
24	284	237	247	312	339
20	297	280	287	327	335
16	316	293	294	337	338

[\[Information Services\]](#)[\[Georgia State Climate Office\]](#)

Information provided by the [Southeast Regional Climate Center](#). (Disclaimer)

Date obtained: January, 1997

Temperature Summary from 1961 To 1990

Missing Data: 0.0%

Station: (90451) ATLANTA WSO AIRPORT

#Day-Max #Day-Min

	Averages			Daily Extremes		Mean Extremes							
	Max	Min	Mean	High---Date	Low---Date	High-Yr	Low-Yr	=>	<=	<=	<=		
								90	32	32	0		
Ja	50.4	31.5	41.2	77	29/1975	-8	21/1985	53.5	74	29.5	77	0.0	1.7
Fe	55.1	34.5	45.0	80	15/1989	8	22/1963	54.6	90	38.5	68	0.0	0.3
Ma	64.2	42.4	53.6	85	10/1974	11	3/1980	58.0	74	47.1	69	0.0	0.0
Ap	72.7	50.1	61.6	93	27/1986	26	11/1973	67.9	81	56.6	61	0.1	0.0
Ma	79.6	58.6	69.3	94	31/1989	37	4/1971	74.4	62	65.2	73	1.0	0.0
Jn	85.7	66.2	76.2	99	6/1985	48	1/1972	81.5	81	71.8	65	8.0	0.0
Jl	87.9	69.5	78.9	105	13/1980	53	15/1967	85.4	80	74.3	67	11.6	0.0
Au	87.0	69.0	78.2	102	8/1980	55	30/1986	84.0	80	74.2	67	9.2	0.0
Se	81.7	63.5	72.9	97	7/1990	36	30/1967	79.1	80	66.7	67	3.0	0.0
Oc	72.7	51.8	62.5	89	6/1981	28	29/1976	70.0	84	56.4	76	0.0	0.0
No	63.4	42.8	53.3	84	2/1961	14	24/1970	62.3	85	44.4	76	0.0	0.0
De	54.0	35.0	44.8	77	12/1971	0	25/1983	53.9	84	35.7	63	0.0	0.0
An	71.2	51.2	61.5	105	7/13/80	-8	1/21/85	65.2	90	59.4	76	33.0	2.5
Wi	53.2	33.7	43.7	80	2/15/89	-8	1/21/85	48.1	89	37.1	77	0.0	2.4
Sp	72.2	50.4	61.5	94	5/31/89	11	3/03/80	63.8	85	58.6	71	1.1	0.0
Su	86.9	68.2	77.8	105	7/13/80	48	6/01/72	82.9	80	73.8	67	28.9	0.0
Fa	72.6	52.7	62.9	97	9/07/90	14	11/24/70	67.2	85	56.9	76	3.0	0.0

[[Information Services](#)][[Georgia State Climate Office](#)]

Information provided by the [Southeast Regional Climate Center](#). (Disclaimer)

Date obtained: January, 1997

Station: (90451) ATLANTA_WSO_AIRPORT

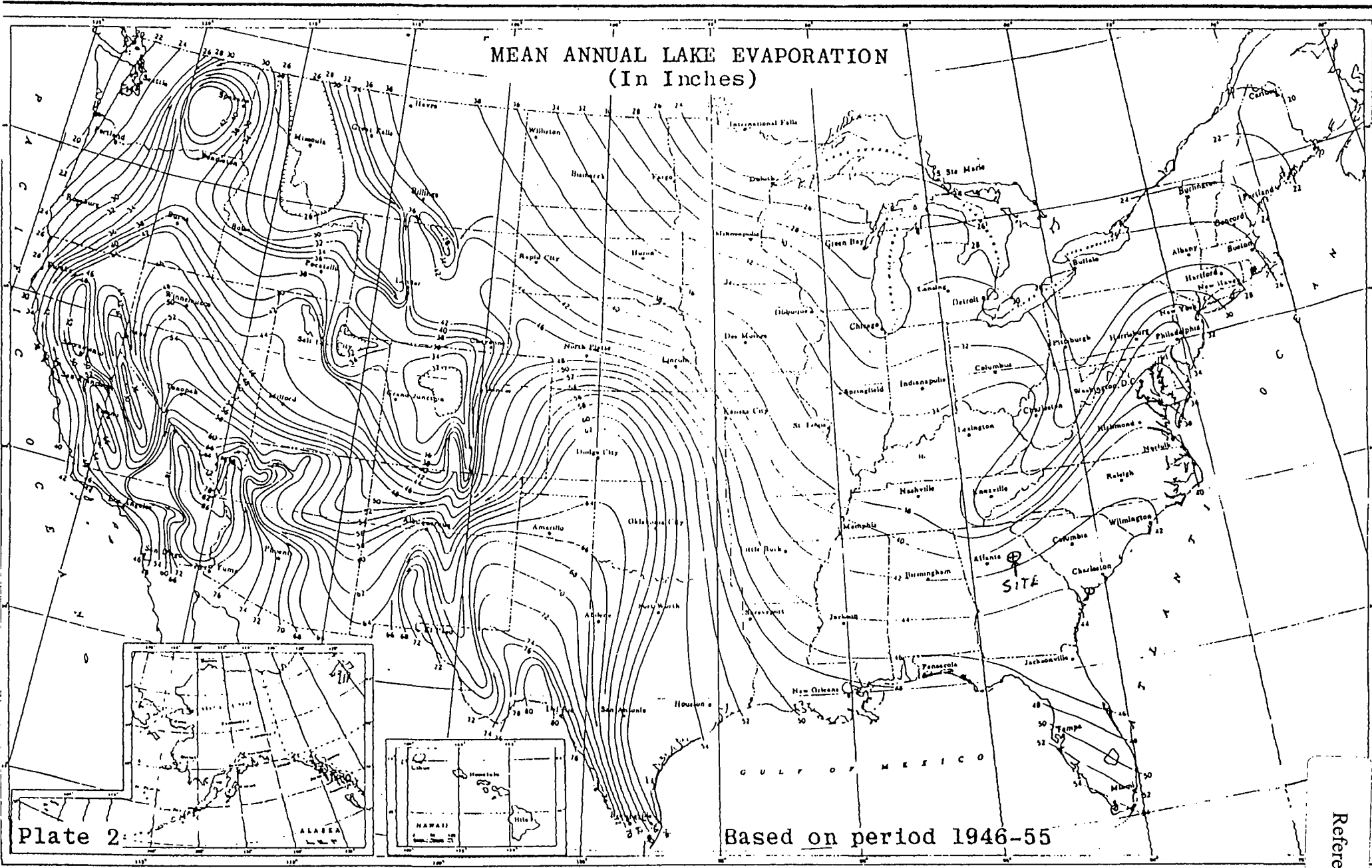
From Year=1961 To Year=1990

Missing Data: 0.0%

	Total Precipitation							Snow		#Days Precip		
	Mean	High--Yr	Low--Yr	1-Day Max		Mean	High--Yr	=>.10	=>.50	=>1.		
Ja	4.75	9.26	72	0.84	81	3.48	7/1973	0.9	7.0	82	8	3
Fe	4.81	12.77	61	0.77	78	3.73	24/1961	0.6	4.4	79	7	3
Ma	5.77	11.66	80	1.86	85	4.64	19/1970	0.4	7.9	83	8	4
Ap	4.26	11.86	79	0.49	86	4.44	13/1979	0.0	0.0	0	6	3
Ma	4.29	8.37	80	0.38	62	4.34	8/1969	0.0	0.0	0	6	3
Jn	3.56	9.34	89	0.16	88	2.55	20/1989	0.0	0.0	0	6	2
Jl	5.01	11.21	84	0.76	80	2.72	24/1963	0.0	0.0	0	8	3
Au	3.66	8.69	67	0.50	76	2.99	25/1984	0.0	0.0	0	7	2
Se	3.42	11.64	89	0.04	84	4.90	25/1989	0.0	0.0	0	5	2
Oc	3.05	7.53	66	0.00	63	3.92	1/1985	0.0	0.0	0	4	2
No	3.86	7.46	83	1.27	90	3.14	21/1962	0.1	1.0	68	6	3
De	4.33	9.92	61	0.69	79	3.10	3/1983	0.2	2.5	63	6	3
An	50.77	66.00	75	40.50	86	4.90	25/09/89	2.3	10.3	83	77	35
Wi	13.89	22.71	90	5.62	86	3.73	24/02/61	1.8	7.7	82	22	10
Sp	14.31	21.91	80	7.57	86	4.64	19/03/70	0.4	7.9	83	20	10
Su	12.23	19.12	89	4.43	83	2.99	25/08/84	0.0	0.0	0	21	8
Fa	10.33	17.32	89	3.68	84	4.90	25/09/89	0.1	1.0	68	15	7

[\[Information Services\]](#)[\[Georgia State Climate Office\]](#)

LAKE EVAPORATION



FEB 13 1995
WEATHER BUREAU
F. W. REICHELDERFER, Chief

U.S. DEPARTMENT OF COMMERCE
LUTHER H. HODGES, Secretary

TECHNICAL PAPER NO. 40

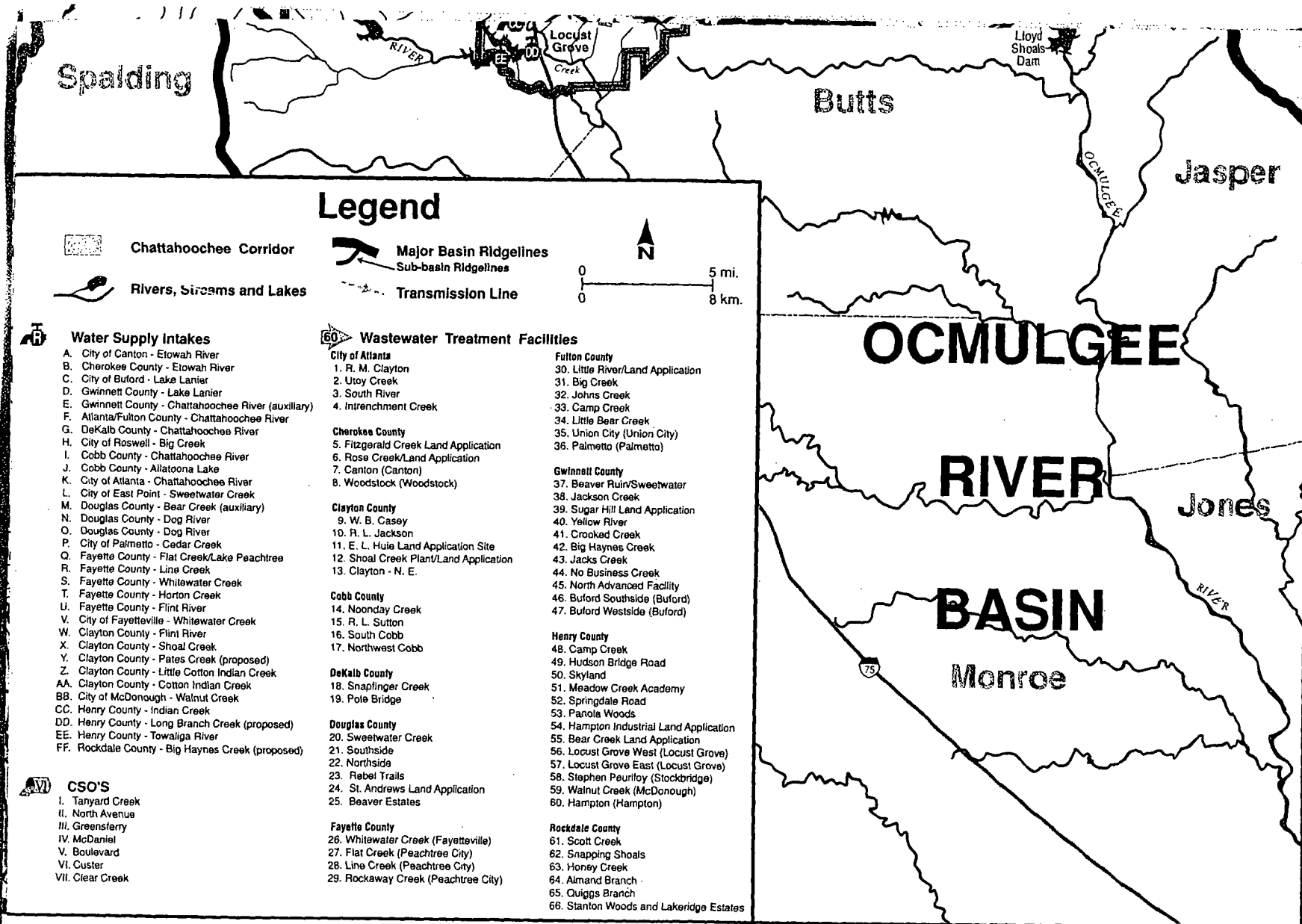
RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

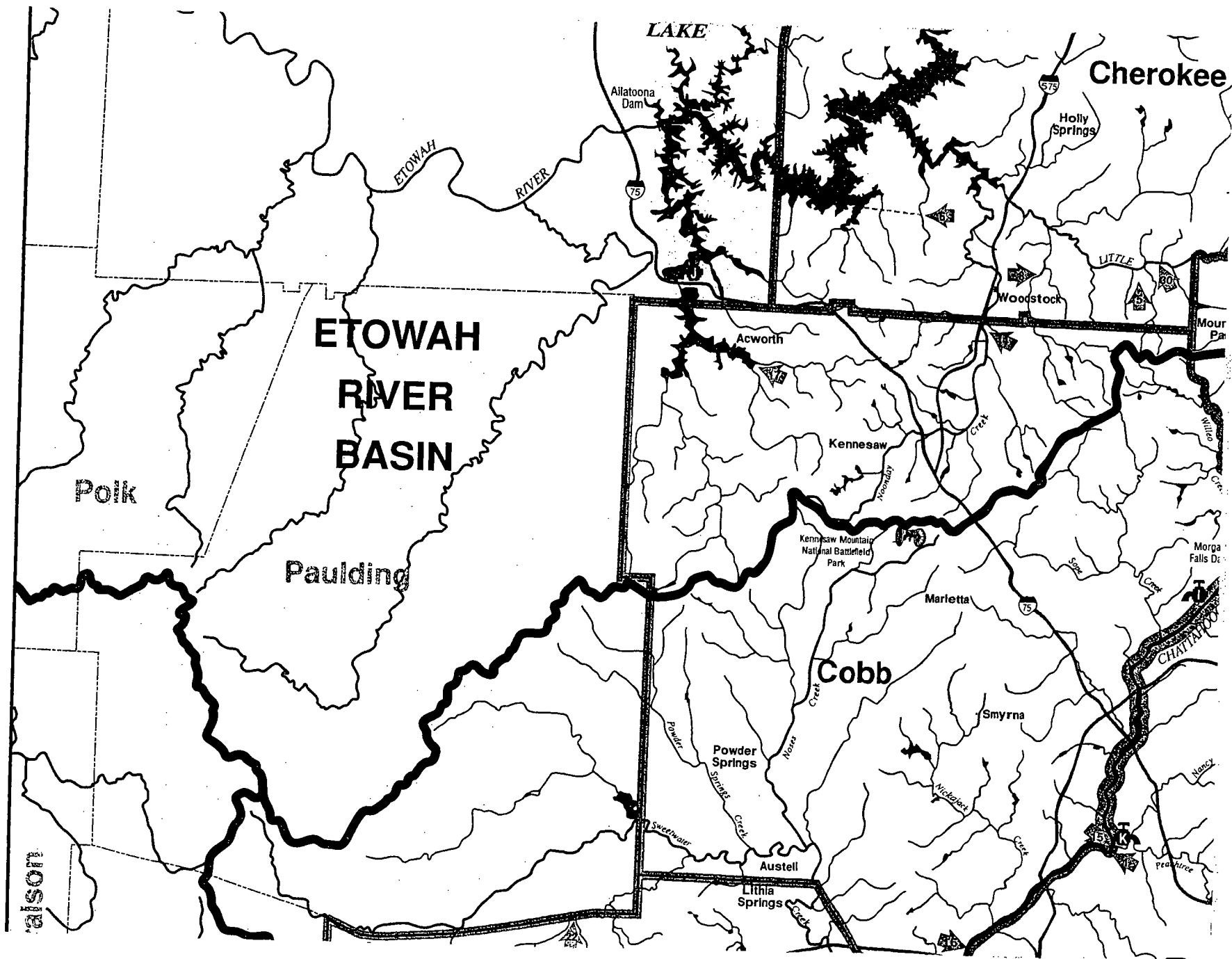
for Durations from 30 Minutes to 24 Hours and
Return Periods from 1 to 100 Years

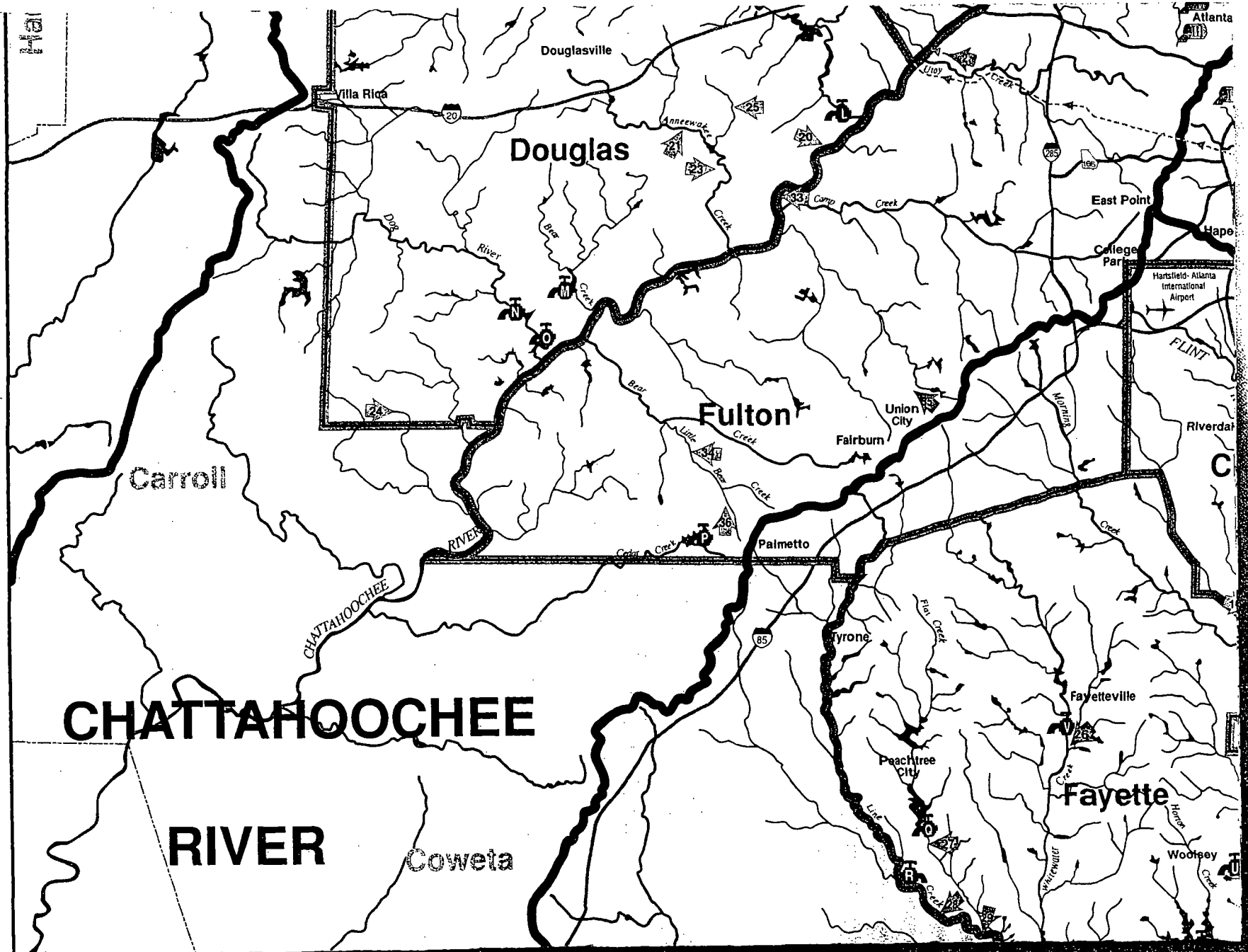
Prepared by
DAVID M. HERSEFIELD
Cooperative Studies Section, Hydrologic Services Division
for
Engineering Division, Soil Conservation Service
U.S. Department of Agriculture



Reference 15

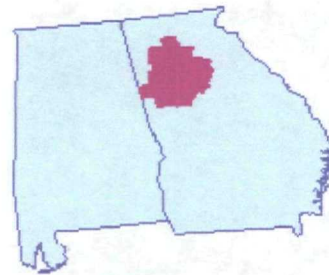






Atlanta, GA

Click on the map to zoom in on your watershed



[Watershed health \(Index of Watershed Indicators \(IWI\)\) information about this metro](#)

[area.](#)

EMPACT In this Urban Area

Get Environmental information for this Urban Area provided by Environmental Monitoring for Public Access and Community Tracking (EMPACT). EPA's [EMPACT](#) program is working in urban areas to bring citizens up-to-date environmental information useful in everyday choices about your health and environment.

- [List of EMPACT websites in this Urban Area](#)
- [View, join or start](#) discussions to share or learn more about real time monitoring technology and communications. Look for the Monitoring - Real Time (EMPACT) selection.
- [EMPACT in Surf Your Watershed](#)
- [View ALL EMPACT Web sites sorted by state.](#)

Watersheds

Water quality in urban areas depends on activities within its [watersheds](#). Watersheds are those land areas that catch rain or snow and drain to specific marshes, streams, rivers, lakes, or to groundwater. Watersheds are becoming the focus for water quality and restoration activities. Scientists are looking at how upstream actions affect conditions in the watershed below.

The maps above show the location of the metro area in the state and the watersheds in the metro area. Get environmental information for this urban area, by first selecting a watershed using the table below and then selecting the link for the Environmental Profile.

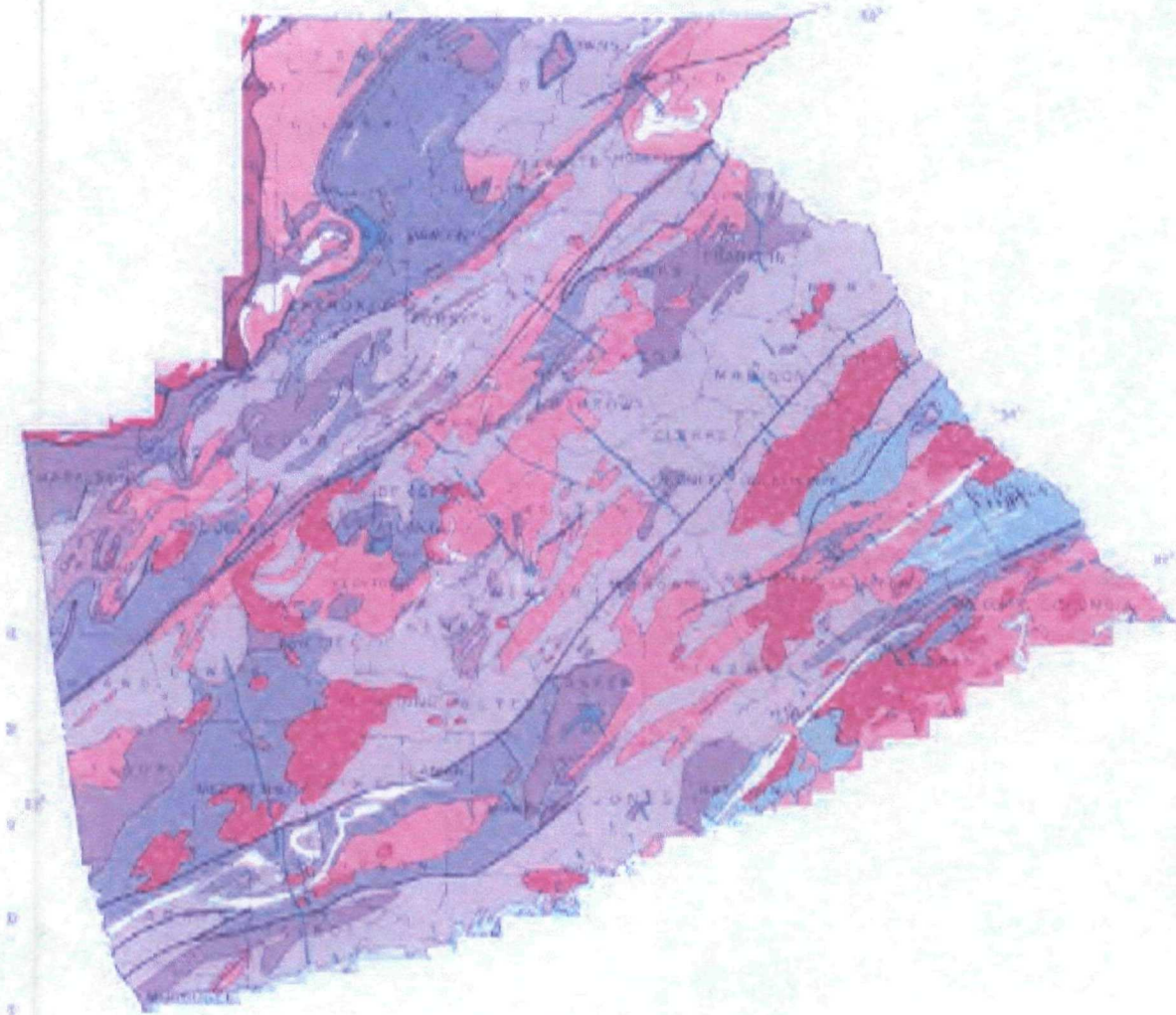
- 03070101 Upper Oconee;states: GA *NPA*
- 03070103 Upper Ocmulgee;states: GA *No Principal Aquifer*
- 03130001 Upper Chattahoochee;states: GA *NPA*

- 03130002 Middle Chattahoochee-Lake Harding;states: AL GA *NPA*
- 03130005 Upper Flint;states: GA *NPA*
- 03150102 Coosawattee;states: GA *NPA*
- 03150103 Oostanaula;states: GA *See Print Out*
- 03150104 Etowah;states: GA *" " "*
- 03150108 Upper Tallapoosa;states: AL GA *NPA*

Geologic Map of Georgia -- Blue Ridge and Piedmont

Georgia Geologic Survey
1977

David E. Lawton



Blue Ridge and Piedmont Crystalline Rocks

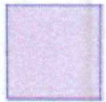
(No stratigraphic order implied)

**GRANITE**

Includes those units which are granitic in composition and texture and units of mixed lithology which are composed predominantly of granite.

**GRANITE GNEISS**

Includes all strongly banded metamorphic units of granitic composition whether of igneous or sedimentary origin.

**BIOTITE GNEISS**

Includes units of metamorphic rock displaying gneissic banding, strong foliation, and relatively high biotite-mica content. Also includes those mixed lithologies which are predominantly biotite gneiss.

**QUARTZITES**

Includes those units which are composed predominantly of metasandstone. Also mixed lithologies in which quartzite predominates.

**METAGRAYWACKE**

Includes metagraywackes with lesser units of mica schist, quartzite, amphibolite and conglomerate.

**MICA SCHIST**

Includes a wide variety of mica schists containing biotite and/or muscovite with lesser units of graphite schist, gneisses, and amphibolites.

**ALUMINOUS SCHISTS**

Includes those mica schist units which contain a moderate to large percentage of aluminosilicate minerals such as garnet, kyanite, sillimanite, and staurolite. Also includes mixed lithologies in which the aluminous schists predominate.

**PELITIC AND
CALCAREOUS ROCKS**

Includes calcareous schists, metagraywackes, metaconglomerates, metasandstones, and marble.

**PHYLLITIC ROCKS**

Includes meta-argillites, phyllites, graphitic phyllites and similar very fine-grained rocks of lower metamorphic grade.

**MAFIC GNEISS**

Includes a wide variety of metamorphic rocks, (composed largely of iron-magnesium silicates) such as amphibolite, hornblende gneiss, and mafic hornfels. Also includes mixed lithologies composed predominantly of these rock types.

**SCHISTOSE MAFIC
ROCKS**

Includes schistose units composed predominantly of various mafic minerals including chlorite, tremolite, actinolite, and hornblende.

**ULTRAMAFIC-MAFIC
ROCKS**

Includes gabbros, serpentinites, diabase, and undifferentiated ultramafics. The generally northwest trending diabase dikes are indicated by thin green lines.

**METAVOLCANIC
ROCKS**

Includes metavolcanic rocks of mafic to felsic composition;
locally includes meta-argillites, phyllites, and schists.

Map and legend are reproduced from *Geologic Map of Georgia*, 1977 (1:2,000,000), compiled by David E. Lawton, available from Georgia Geologic Survey.

This map and the larger (1:500,000) 1976 *Geologic Map of Georgia* were compiled when the ideas of plate tectonics were relatively new and their implications for Georgia geology were not well understood. See [reading list](#) for more recent interpretations.

The Piedmont

The Piedmont is a region of moderate-to-high-grade [metamorphic rocks](#), such as schists, amphibolites, [gneisses](#) and migmatites, and igneous rocks like [granite](#). Topographically, the Piedmont mostly consists of rolling hills, although faulting has produced the impressive ridge of Pine Mountain near Warm Springs. Isolated granitic plutons also rise above the Piedmont landscape to give prominent features like [Stone Mountain](#).

One major feature cutting across the Piedmont (as defined here) is the Brevard Fault zone. The Brevard Fault Zone runs SW-NE and passes through Centralhatchee in Heard County, northwest Atlanta, Duluth, Buford, and Gainesville before leaving Georgia at the westernmost point on the Tugaloo River in northernmost Stephens County. The [Chattahoochee River](#) follows the Brevard Zone too. However, the regional extent of the Brevard Zone is reflected by the fact that it is named after the town of Brevard, NC. The [Brevard Zone](#) has been interpreted as a variety of different kinds of faults or discontinuities, and its true nature remains enigmatic.

Piedmont soils are commonly a red color for which Georgia is famous. Those soils consist of khandite-group (kaolinite, halloysite, dickite) clays and of iron oxides. They result from the intense weathering of feldspar-rich igneous and metamorphic rocks. This intense weathering dissolves or alters nearly all minerals and leaves behind a residue of aluminum-bearing clays and iron-bearing iron oxides because of the low solubilities of aluminum and iron at earth-surface conditions. Those iron oxides give the red color to the clay-rich soil, yielding the [red clay](#) that has come to be almost synonymous with central Georgia, and the abundance of clay has contributed to a tradition of [folk pottery](#) in central and north Georgia.

Mineral resources of the Piedmont include hard crushed stone, which is quarried by such companies as [Vulcan Materials](#). [Granite](#) has long been quarried for tombstones and other monuments in the eastern Piedmont near [Elberton](#), and it was once quarried from the [Stone Mountain granite](#) at [Stone Mountain Park](#). Soapstone was mined by Native Americans in southwestern [DeKalb County](#) at [Soapstone Ridge](#). One well-known kyanite mine in the Piedmont was at [Grave's Mountain](#). [Groundwater](#) in the Piedmont largely flows along faults and fractures, making it difficult to find but often locally abundant.

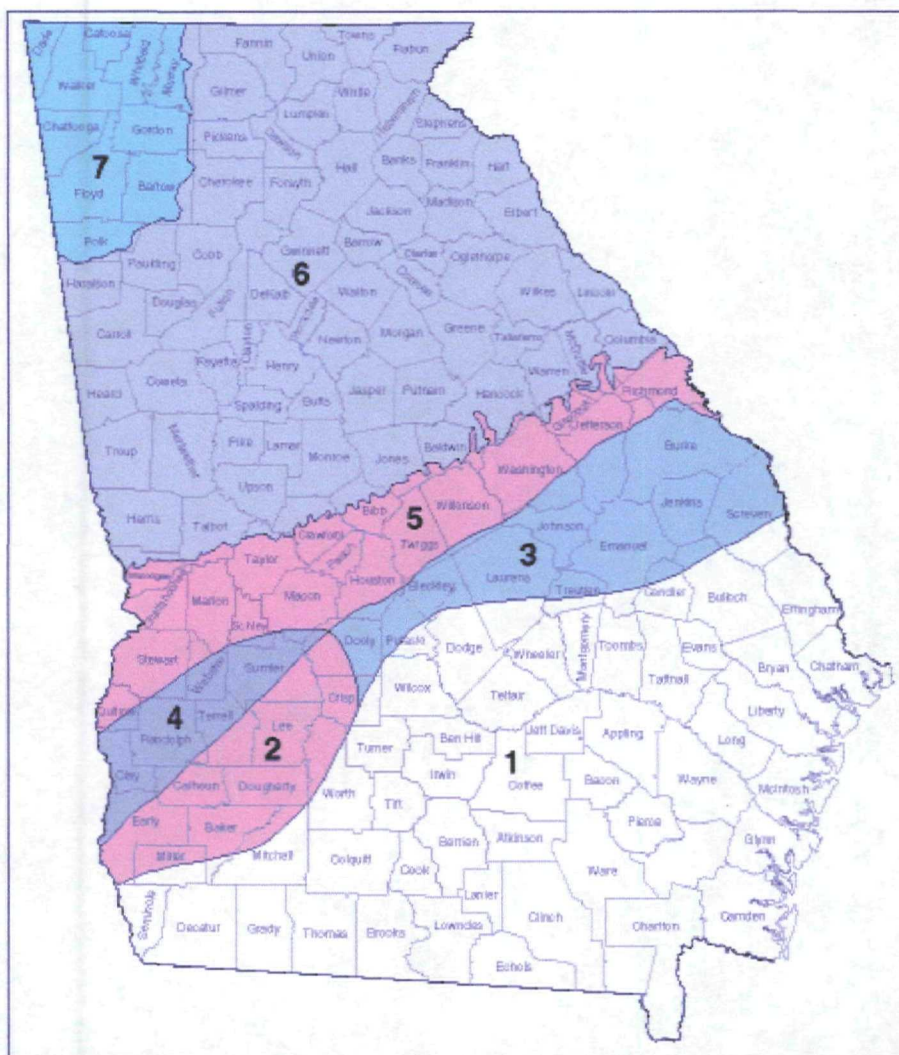
The granitic rocks of the Piedmont make [radon](#) a potential concern in the region. The [USGS map of geologic radon potential](#) shows the Piedmont, as well as the Blue Ridge, as a region of "moderate" radon potential, whereas that potential is "low" in the Valley and Ridge and Coastal Plain.

Athens and Atlanta are two cities in the Georgia Piedmont. The Piedmont extends a little bit westward into Alabama before it pinches out between the Valley and Ridge and the Coastal Plain. To the northeast, it cuts a broad swath across South Carolina, North Carolina, and Virginia. Spartanburg, SC, and Greensboro and Winston-Salem, NC, are Piedmont cities to the northeast of Georgia.



Ground-Water Conditions in Georgia, 1999

USGS Open-File Report 00-515



COASTAL PLAIN AQUIFERS

- 1** [Floridan aquifer system and upper and lower Brunswick aquifers, undifferentiated](#)
- 2** [Floridan aquifer system, Claiborne, Clayton, and Providence aquifers](#)
- 3** [Floridan aquifer system, Gordon, and Cretaceous aquifers systems](#)
- 4** [Claiborne aquifer, Clayton aquifer, and Providence aquifer](#)
- 5** [Cretaceous aquifer systems](#)

PIEDMONT AND BLUE RIDGE AQUIFERS

- 6** [Crystalline-rock aquifers](#)

VALLEY AND RIDGE AND APPALACHIAN PLATEAU AQUIFERS

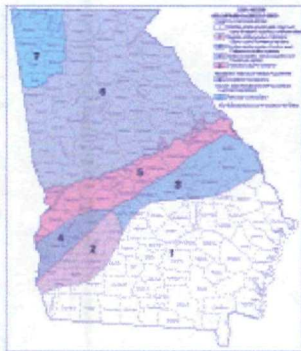
- 7** [Paleozoic-rock aquifers](#)
(Surficial aquifers)



Ground-Water Conditions in Georgia, 1999

USGS Open-File Report 00-515

GROUND-WATER RESOURCES



Contrasting geologic features and landforms of the physiographic provinces of Georgia (table 2, fig. 1) result in substantial differences in ground-water conditions from one part of the State to another. These features that make up the framework of the aquifers affect the quantity and quality of ground water throughout the State.

Surficial aquifers are present in each of the physiographic provinces. In the Piedmont, Blue Ridge, and Valley and Ridge Provinces (fig. 1), the surficial aquifers consist of soil, saprolite, stream alluvium, colluvium, and other surficial deposits. In the Coastal Plain Province, the surficial aquifers consist of intermixed layers of sand, clay, and limestone. The surficial aquifers usually are under water-table (unconfined) conditions and are used for domestic and livestock supplies. These aquifers are semiconfined locally in the coastal area.

In the Piedmont and Blue Ridge Provinces, rocks are complex and consist of structurally deformed metamorphic and igneous rocks. Ground water is transmitted through secondary openings along fractures, foliation, joints, contacts, or other features in the crystalline bedrock. In the Valley and Ridge Province, ground water is transmitted through both primary and secondary openings in folded and faulted sedimentary and metasedimentary rocks of Paleozoic age.

The most productive aquifers in Georgia are in the Coastal Plain Province in the southern part of the State. The Coastal Plain is underlain by alternating layers of sand, clay, dolomite, and limestone that dip and thicken to the southeast. Coastal Plain aquifers generally are confined except near their northern limits, where they crop out or are near land surface. Aquifers in the Coastal Plain include the upper and lower Brunswick aquifers, the Floridan aquifer system, the Claiborne aquifer, the Gordon aquifer, the Clayton aquifer, and the Cretaceous aquifers and aquifer systems.

Table 2. Aquifer and well characteristics in Georgia

[modified from [Clarke and Pierce](#) (1984) and [Peck and others](#) (1992); ft, feet; gal/min, gallons per minute]

Well characteristics

Aquifer name and description	Depth (ft)	Yield (gal/min)		Remarks
	Common range	Common range	May exceed	
<u>Surficial aquifer:</u> Unconsolidated sediments; residuum, generally unconfined	11-72	2-25	25	Primary source of water for domestic and livestock supply in rural areas. Supplemental source of water in coastal Georgia.
<u>Upper and lower Brunswick aquifers:</u> Phosphatic and dolomitic quartz sand, generally confined	85-390	10-30	180	Not a major source of water in coastal Georgia, but considered a supplemental water supply to the Upper Floridan aquifer. Most wells are multi-aquifer, tapping the upper and lower Brunswick aquifers and the Upper Floridan aquifer. The lower Brunswick aquifer currently is not monitored (Clarke and others, 1990, p. 26-28).
<u>Floridan aquifer system:</u> Limestone, dolomite, and calcareous sand, generally confined	40-900	1,000- 5,000	11,000	Supplies 50 percent of ground water in Georgia. The aquifer system is divided into the <u>Upper</u> and <u>Lower Floridan</u> aquifers. In the Brunswick area, the Upper Floridan aquifer includes two freshwater- bearing zones, the upper water- bearing zone and the lower water- bearing zone. The Lower Floridan aquifer is not considered a major aquifer. In the Brunswick area and in southeastern Georgia, the Lower Floridan aquifer includes the brackish-water zone, the deep freshwater zone, and the Fernandina permeable zone (Krause and Randolph, 1989). The Lower Floridan aquifer extends to more than 2,700 ft and yields high- chloride water below 2,300 ft (Jones and Maslia, 1994).
<u>Gordon aquifer</u>	270-530	87-1,200	1,800	Major source of water for

system:

Sand and sandy
limestone,
generally
confined

irrigation, industrial, and public-
supply use in east-central Georgia.

Claiborne
aquifer:

Sand and sandy
limestone,
generally
confined

20-450 150-600

1,500

Major source of water for
irrigation, industrial, and public-
supply use in southwestern Georgia.

Clayton aquifer:

Limestone and
sand, generally
confined

40-800 250-600

2,150

Major source of water for
irrigation, industrial, and public-
supply use in southwestern Georgia.

Cretaceous
aquifers and
aquifer systems:

Sand and gravel,
generally
confined

30-750 50-1,200

3,300

Major source of water in east-
central Georgia. Supplies water for
kaolin mining and processing.
Includes the Providence aquifer in
southwestern Georgia, and the
Dublin, Midville, and Dublin-
Midville aquifer systems in east-
central Georgia.

Paleozoic-rock
aquifers:

Sandstone,
limestone, and
dolostone

15-2,100

1-50

3,500

Not laterally extensive. Limestone
and dolostone aquifers are most
productive. Storage is in regolith,
primary openings, and secondary
fractures and solution openings in
rock. Springs in limestone and
dolostone aquifers discharge at
rates of as much as 5,000 gal/min.
Sinkholes may form in areas of
intensive pumping.

Crystalline-rock
aquifers:

Granite, gneiss,
schist, and
quartzite

40-600

1-25

500

Not laterally extensive. Storage is in
regolith and fractures in rock.
Hydrogeology of crystalline-rock
aquifers is not well understood.

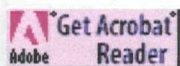
GROUND-WATER LEVELS

Short-term fluctuations and long-term trends in ground-water levels result from variations in recharge and discharge. Recharge varies in response to precipitation and surface-water infiltration into an aquifer. Discharge occurs as natural flow from an aquifer to streams and springs, as evapotranspiration, and as withdrawal from wells.

Discussions of ground-water levels in Georgia are grouped by aquifer and subdivided into areas and subareas in which wells have similar water-level fluctuations and trends.

Water-level fluctuations in 1999 are shown for 130 continuously monitored wells, which are considered to be representative of ground-water levels throughout the State. For each well, well-site information is listed, record high and low water levels for the period of record, monthly mean water levels are shown in hydrographs for the period of record, daily mean water levels are shown in hydrographs for 1999, and monthly and annual water-level statistics (minimum, mean, and maximum daily mean water levels) are tabulated for 1999. Monthly statistics are not computed for months having less than 25 days of record. Extreme water levels for the period of record listed in the well-site information and tabulated water-level statistics are reported to the nearest 0.01 ft, reflecting the accuracy of the recorders used. Land-surface data generally are determined from the best available topographic map, and are accurate to about one-half the contour interval. Some land-surface data were determined by surveying methods or Global Positioning System (GPS) and are more accurate. In this report, an extreme water level refers to the lowest or highest daily mean water level for the period of record of a particular well. Thus, any instantaneous water-level measurement on a given day may be lower or higher than the extreme water level reported in the text, the daily mean water level shown on the hydrograph, or the minimum or maximum values tabulated.

Web version note: you may continue reading the text of this report by clicking on 'Next' below, or you may go directly to one of the lists to access the PDF file for one or more wells.



To download and view PDF files, you'll need the free Adobe Acrobat Reader software.

Observation wells for which hydrographs are included in this report:

- [Listed by county](#) (Table 3a)
- [Listed by aquifer](#) (Table 3b)
- [Listed by well identification number](#) (Table 4)

[Back](#) | [Next](#)

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Water System

<!--StartFragment-->

FULTON	GA1210000	ALPHARETTA				101 NORTH FULTON
COUNTY		GA1210005	PURCHASE CONNECTION	SURFACE WATER		
ACTIVE	FULL TIME/REGULAR				10/13/1999	DEKALB
GA1210001	ATLANTA					101 CHATTAHOOCHEE RIVER
		INTAKE		SURFACE WATER		ACTIVE
*FULL TIME/REGULAR	334941	33.82	842727	-84.45	11/27/2000	FULTON
ATLANTA						GA1210001
						101 CHATTAHOOCHEE RIVER
		INTAKE		SURFACE WATER		ACTIVE
TIME/REGULAR	334941	33.82	842727	-84.45	11/27/2000	DEKALB
ATLANTA						GA1210001
	GA1210038	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
ATLANTA						GA1210001
	GA1210038	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
COLLEGE PARK						GA1210002
	GA1210003	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR	333921	33.65	842732	-84.45	10/13/1999	FULTON
POINT						GA1210003
						101 SWEETWATER CREEK
		INTAKE		SURFACE WATER		ACTIVE
TIME/REGULAR	334315	33.72	843656	-84.61	10/13/1999	FULTON
FAIRBURN						GA1210004
	GA1210001	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR	333414	33.57	843507	-84.58	10/13/1999	FULTON
FULTON COUNTY						GA1210005
						101 COBB CO.-MARIETTA WATER SYSTEM
GA0670002	PURCHASE CONNECTION	SURFACE WATER				ACTIVE
TIME/REGULAR					10/13/1999	FULTON
FULTON COUNTY						GA1210005
	GA1350004	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
FULTON COUNTY						GA1210005
	GA1210001	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
FULTON COUNTY						GA1210005
	GA1210038	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
HAPEVILLE						GA1210006
	GA1210001	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
MOUNTAIN PARK						GA1210007
	GA0670002	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
PALMETTO						GA1210008
						101 OLD CEDAR CREEK RESERVOIR
		INTAKE		SURFACE WATER		ACTIVE
TIME/REGULAR	333152	33.53	844244	-84.71	10/13/1999	FULTON
PALMETTO						GA1210008
						102 NEW CEDAR CREEK RESERVOIR
		INTAKE		SURFACE WATER		ACTIVE
TIME/REGULAR	333153	33.53	844302	-84.71	10/13/1999	FULTON
ROSWELL						GA1210009
						101 BIG CREEK
		INTAKE		SURFACE WATER		ACTIVE
TIME/REGULAR	340110	34.01	842102	-84.35	10/13/1999	FULTON
ROSWELL						GA1210009
	GA1210038	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR					10/13/1999	FULTON
CITY						GA1210010
	GA1210001	PURCHASE CONNECTION	SURFACE WATER			ACTIVE
TIME/REGULAR	333449	33.58	843307	-84.55	10/13/1999	FULTON
CHESTNUT HILL ACADEMY						GA1210020
						101 WELL #1
		WELL		GROUNDWATER		ACTIVE
TIME/REGULAR	333333	33.55	842752	-84.46	10/13/1999	FULTON
PROVIDENCE PARK						GA1210037
						101 WELL #1

WELL
TIME/REGULAR
ATLANTA-FULTON WATER RES COMM
INTAKE
TIME/REGULAR
RED`S BBQ #2
<!--EndFragment-->

GROUNDWATER ACTIVE FULL
10/13/1999 FULTON GA1210038
101 CHATTAHOOCHEE RIVER
SURFACE WATER ACTIVE FULL
10/13/1999 FULTON GA1210040 PAPPY
101 WELL #1

CERCLIS Query Results

Consolidated facility information (from multiple EPA systems) was searched to select facilities

EPA FACILITY ID: Beginning With: **GAD003267192**

Results are based on data extracted on FEB-07-2001

Note: Click on the underlined CORPORATE LINK value for links to that company's environmental web pages. Click on the underlined MAPPING INFO value to obtain mapping information for the facility. Click on the underlined RECORD OF DECISION value for a RODS Site Report. Click on the underlined FACILITY ID to view EPA Facility Information for this site.

[Go To Bottom Of The Page](#)

<u>SUPERFUND SITE ID:</u>	0401311	<u>SITE NAME:</u>	ZEP MFG CO
<u>STREET ADDRESS:</u>	1310 SEABOARD IND BLVD	<u>EPA FACILITY ID:</u>	GAD003267192
<u>CITY NAME:</u>	ATLANTA	<u>OWNERSHIP STATUS:</u>	Other
<u>STATE ABBR:</u>	GA	<u>FEDERAL FACILITY:</u>	N
<u>ZIP CODE:</u>	30318	<u>NPL STATUS:</u>	Not on the NPL
<u>COUNTY NAME:</u>	FULTON	<u>SITE INCIDENT TYPE:</u>	
<u>CORPORATE LINK:</u>	No	<u>RECORD OF DECISION (ROD) INFO:</u>	No
<u>LATITUDE:</u>		<u>EPA REGIONAL LINK:</u>	No
<u>LONGITUDE:</u>		<u>MAPPING INFO:</u>	MAP
<u>SITE SMSA:</u>	0520		

Enforcement and Cleanup Actions

<u>Action</u>	<u>Action ID</u>	<u>Planned Start Date</u>	<u>Planned End Date</u>	<u>Actual Start Date</u>	<u>Actual End Date</u>	<u>Responsibility</u>	<u>Planned Outcome</u>	<u>Urgency</u>
SITE INSPECTION	001				08/15/1990	State, Fund Financed	Deferred to RCRA (Subtitle C)	
PRELIMINARY ASSESSMENT	001				08/19/1986	State, Fund Financed	Low	
DISCOVERY	001				08/01/1980	EPA Fund-Financed		

				water
GA1210005	NORTH FULTON COUNTY	FULTON	126040	Purchased surface water
GA1210008	PALMETTO	FULTON	2665	Surface water
GA1210009	ROSWELL	FULTON	12381	Surface water
GA1210010	UNION CITY	FULTON	6500	Purchased surface water

Non-Transient Non-Community Water Systems: Water Systems that serve the same people, but not year-round (e.g. schools that have their own water system).

Water System ID	Water System Name	Principal County Served	Population Served	Primary Water Source Type
GA1210039	CHAMPIONS CLUB OF ATLANTA	FULTON	255	Ground water
GA1210020	CHESTNUT HILL ACADEMY	FULTON	100	Ground water

Transient Non-Community Water Systems: Water Systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations).

Water System ID	Water System Name	Principal County Served	Population Served	Primary Water Source Type
GA1210011	CAMP CHATTAHOOCHEE	FULTON	100	Ground water
GA1210023	CAMP WESLEY	FULTON	160	Ground water
GA1210040	PAPPY RED'S BBQ #2	FULTON	200	Ground water
GA1210037	PROVIDENCE PARK	FULTON	400	Ground water



Safe Drinking Water Query Results

Page 1

Query Selections

State selected: GEORGIA

County selected: FULTON

Query executed on: FEB-27-2001

Results are based on data extracted on:

List of Water Systems in SDWIS

Water systems in GEORGIA are [regulated by](#) GEORGIA EPD DWP

For a detailed Violation and Enforcement History click on the underlined Water System ID. To obtain additional information about drinking water please call EPA's Safe Drinking Water hotline at 1-800-426-4791.

Community Water Systems: Water Systems that serve the same people year-round (e.g. in homes or businesses).

<u>Water System ID</u>	<u>Water System Name</u>	<u>Principal County Served</u>	<u>Population Served</u>	<u>Primary Water Source Type</u>
GA1210000	ALPHARETTA	FULTON	8060	Purchased surface water
GA1210001	ATLANTA	FULTON	650000	Surface water
GA1210038	ATLANTA-FULTON WATER RES COMM	FULTON	0	Surface water
GA1210002	COLLEGE PARK	FULTON	20645	Purchased surface water
GA1210003	EAST POINT	FULTON	34616	Surface water
GA1210004	FAIRBURN	FULTON	4719	Purchased surface water
GA1210006	HAPEVILLE	FULTON	5385	Purchased surface water
GA1210007	MOUNTAIN PARK	FULTON	679	Purchased surface

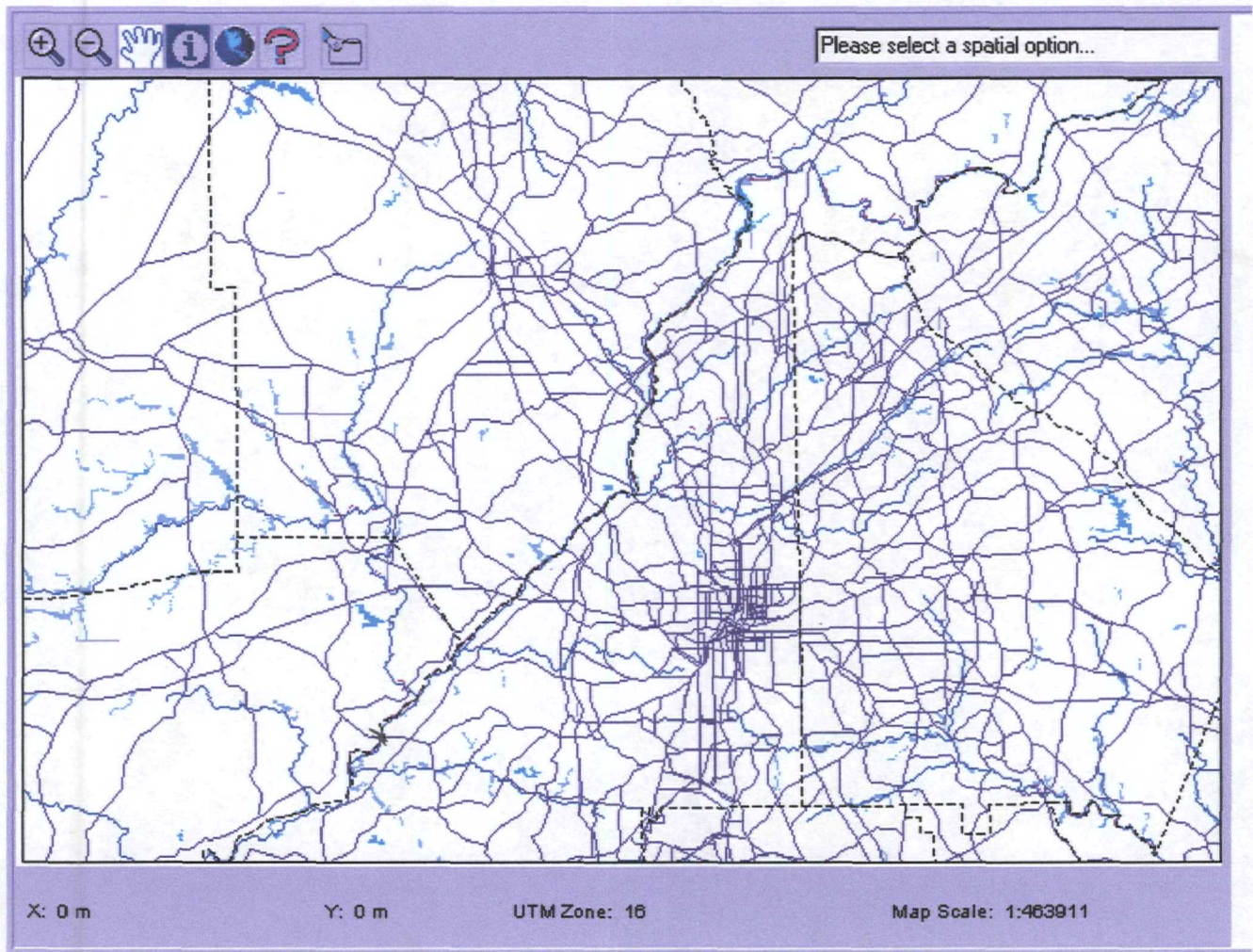
```

<!--StartFragment-->
# US GEOLOGICAL SURVEY# DAILY MEAN DISCHARGE DATA## Station name : Peachtree
Creek At Atlanta, Ga.# Station number: 02336300# latitude
(ddmmss)..... 334910# longitude
(dddmmss)..... 0842428# state
code..... 13#
county..... Fulton# hydrologic unit
code..... 03130001# basin
name..... Upper Chattahoochee# drainage area
(square miles)..... 86.8# contributing drainage area (square
miles)..... # gage datum (feet above NGVD)..... 763.96# base
discharge (cubic ft/sec)..... 2500# WATSTORE parameter
code..... 00060# WATSTORE statistic
code..... 00003# Discharge is listed in the table in cubic
feet per second.# # Daily mean discharge data were retrieved from the# National
Water Information System files called ADAPS.## Format of table is as follows.#
Lines starting with the # character are comment lines describing the data#
included in this file. The next line is a row of tab-delimited column# names
that are Date and Discharge. The next line is a row of tab-delimited# data type
codes that describe a 10-character-wide date (10d) and an# 8-character-wide
numeric value for discharge (8n). All following lines are# rows of
tab-delimited data values of date (year.month.day) and discharge.# A value of
'&quot;E&quot;' or '&quot;e&quot;' in the Flags field indicates that the discharge
for# this day was estimated. Any other values shown in this field are
irrelevant.# # NOTE this file was requested from the NWIS-W software package# on
Tue Mar 13 12:16:32 2001<!--EndFragment-->

```

<!--StartFragment-->

US GEOLOGICAL SURVEY# DAILY MEAN DISCHARGE DATA## Station name : Chattahoochee
 River At Atlanta, Ga.# Station number: 02336000# latitude
 (ddmmss)..... 335133# longitude
 (dddmmss)..... 0842716# state
 code..... 13#
 county..... Fulton# hydrologic unit
 code..... 03130001# basin
 name..... Upper Chattahoochee# drainage area
 (square miles)..... 1450# contributing drainage area (square
 miles)..... # gage datum (feet above NGVD)..... 750.1# base
 discharge (cubic ft/sec)..... 13000# WATSTORE parameter
 code..... 00060# WATSTORE statistic
 code..... 00003# Discharge is listed in the table in cubic
 feet per second.# # Daily mean discharge data were retrieved from the# National
 Water Information System files called ADAPS.## Format of table is as follows.#
 Lines starting with the # character are comment lines describing the data#
 included in this file. The next line is a row of tab-delimited column# names
 that are Date and Discharge. The next line is a row of tab-delimited# data type
 codes that describe a 10-character-wide date (10d) and an# 8-character-wide
 numeric value for discharge (8n). All following lines are# rows of
 tab-delimited data values of date (year.month.day) and discharge.# A value of
 "E" or "e" in the Flags field indicates that the discharge
 for# this day was estimated. Any other values shown in this field are
 irrelevant.# # NOTE this file was requested from the NWIS-W software package# on
 Tue Mar 13 12:25:21 2001<!--EndFragment-->



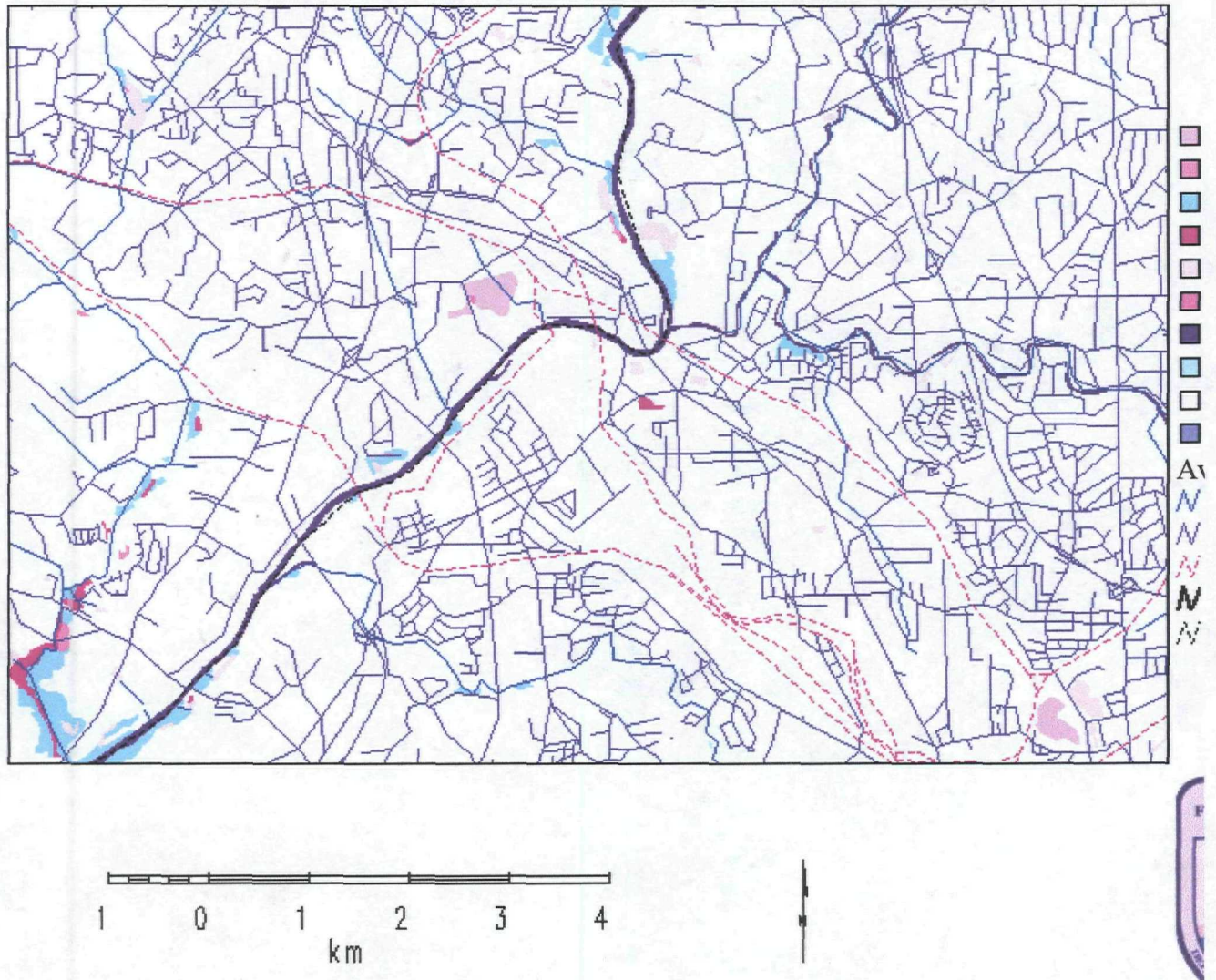
[Return to Area Selection](#)

[Return to NWI Home Page](#)

[Input Comments or Issues](#)

[Troubleshooting](#)

Wetland Data Provided by the U.S. Fish and Wildlife Service's National Wetland Inventory



- ☐ L1UB [L] Lacustrine, [1] Limnetic, [UB] Unconsolidated Bottom
- ☐ PEM1 [P] Palustrine, [EM] Emergent, [1] Persistent
- ☐ PFO1 [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous
- ☐ PSS1 [P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous
- ☐ PUB [P] Palustrine, [UB] Unconsolidated Bottom
- ☐ PUS [P] Palustrine, [US] Unconsolidated Shore
- ☐ R2UB [R] Riverine, [2] Lower Perennial, [UB] Unconsolidated Bottom
- ☐ R2US [R] Riverine, [2] Lower Perennial, [US] Unconsolidated Shore
- ☐ Upland [U] Upland

Close Window



Known Locations of Rare and Other Special
Concern Animals, Plants and Natural Communities
in GNHP Database for:

FULTON COUNTY



Index of Georgia Counties

"US" indicates both U.S. protected and Georgia protected species

"GA" indicates Georgia protected species

List generated on: Tuesday October 31, 2000

Animals

- GA• *Aimophila aestivalis* Bachman's Sparrow
- GA• *Cyprinella callitaenia* Bluestripe Shiner
- US• *Lampsilis subangulata* Shinyrayed Pocketbook
- US• *Medionidus penicillatus* Gulf Moccasinshell
- GA• *Notropis hypsilepis* Highscale Shiner
- *Quincuncina infucata* Sculptured Pigtoe

Plants

- US• *Aster georgianus* Georgia Aster
- GA• *Cypripedium acaule* Pink Ladyslipper
- GA• *Cypripedium calceolus var. pubescens* Large-flowered Yellow Ladyslipper
 - *Dryopteris celsa* Log Fern
 - *Dryopteris cristata* Crested Wood Fern
 - *Fothergilla major* Mountain Witch-alder
- GA• *Hexastylis shuttleworthii var. harperi* Harper Heartleaf
 - *Listera australis* Southern Twayblade
 - *Panax quinquefolius* American Ginseng
- GA• *Schisandra glabra* Bay Starvine
- GA• *Waldsteinia lobata* Piedmont Barren Strawberry

Project Note

Date: 3/13/01
Time: 10:40

ZEP Manufacturing Co.
Atlanta, Fulton County, Georgia
EPA ID Number: GAD003267192

Organization: TN & Assoc., Inc.,
Reg. 4 EPA STAT Contract

Name: John E. Axelson Signature: _____

Subject: Underground Storage Tanks

I spoke with Mr. Ron Wallace, Senior Geologist, with the GA-EPD, UST Management Program (404-362-2589). Mr. Wallace did a search to see if there were any USTs registered for the ZEP facility, and his search documented that there are no registered tanks.

RESPONSE REQUIRED

(x) None () Phone call () Memo () Letter () Report

cc: (x) File () Project Manager () Principal Investigator () Other (specify)

POPULATION WORKSHEET	
ZEP Atlanta, GA	
GAD 003 267 192	
Population Radius	Population
0.25 Mile	0
0.50 Mile	2658
1 Mile	7282
2 Mile	24914
3 Mile	61781
4 Mile	131847
Population Ring*	Population
0 to 0.25 Mile	0
0.25 to 0.5 Mile	2658
0.5 to 1 Mile	4624
1 to 2 Mile	17632
2 to 3 Mile	36867
3 to 4 Mile	70066

*Population rings were determined by subtracting out the previous area's value from the current population value.

Reference: LandView IV

Name: _____

Signature: _____

TN&Associates, Inc.
840 Kennesaw Avenue, Suite 7
Marietta, GA 30060
(678) 355-5550